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GYNÆCOLOGICAL NOTES.

By T. J. Hutton, M. D.,
Resident Physician, Long Island College Hospital, Brooklyn, New York.

The following cases, representing a department seldom touched in clinical reports, may not be lacking in interest. They occurred in the hospital practice of Prof. Alexander J. Skene, include amputations of the cervix uteri, and operations for ruptured perineum; and are quoted from the clinical record as originally noted.

Amputations of Cervix Uteri.

Case I.—Jane M——., æt 40, Ireland, housekeeper, admitted to hospital May 24, 1871. Diagnosis: scirrhus of cervix uteri. History; married fifteen years, and has had four children; last three years ago. Enjoyed good health until one year ago, when menstruation became deranged; pelvic uneasiness and debility ensued. Symptoms: constitutional debility, and pelvic pain, and slight discharge of ichoro-sanguineous character. Physical signs: cervix indurated and ulcerated; tenderness of parts. Treatment: on day of admission patient was anæsthetized by ether, and the diseased and suspected tissues removed by the galvano-cautery; no hemorrhage.

May 25. Patient suffers slight nausea and depression from use of anæsthetic, but no pain.

May 28. Feeling comfortable; appetite pretty good; slight sero-purulent discharge from vagina; ordered the vagina syringed twice daily with weak carbolized water.

June 8. Stump almost completely healed; patient left hospital.

July 17. Comes to report that her health is excellent.

Case II.—Mary J. S——, æt 40, Ireland, domestic, widow, admitted June 19, 1871. Diagnosis: ulcerating epithelioma of the cervix uteri. History: married at 30; gave birth to a child five years ago; soon after began to suffer pain in side and pelvis; also a profuse ichoro-sanguineous discharge from vagina. Symptoms: pain in side, back and pelvis; also profuse discharge, at times assuming the character of metrorrhagia, and extremely prostrating to patient. Physical signs: corroding ulcer, chiefly on left side of the cervix: base of latter markedly indurated. Treatment: scarifications of os, and astringent injections were resorted to without any benefit.

July 18. The indurated portion of cervix was pierced or transfixed by six caustic arrows, patient being anæsthetized.

July 25. Slough came away, but did not remove all the indurated portion; has removed all the diseased tissue.

July 31. Healthy granulations progressing; tepid water injections used thrice daily.

Aug. 8. Patient left hospital feeling comfortable.

Oct. 12. Returned to report herself in excellent health.

Case III.—Catherine S——, æt. 26, Ireland, housekeeper, admitted January 1, 1872. Diagnosis: Elongation of cervix uteri, and prolapsus in second degree. History: patient has been married nine years; no children: no miscarriages; health has been failing during last three years; has been

under treatment most of the time for prolapsus, but getting worse instead of better. Symptoms: nervous system markedly disturbed; sleeplessness, pelvic and abdominal pain, hysteria and despondency are present—nutritive system: coated tongue, dyspepsia, constipation—urinary organs: irritable bladder, difficult and painful micturition; menstruation painful and scanty; recurs every three weeks; duration, two or three days. Physical signs: enlarged cervix, uterus prolapsed, and tenderness of the parts. Treatment: cervix amputated by scissors and forceps, patient anæsthetized, and lying on left side; Sim's speculum being used; mucous membrane of cervix drawn together on either side of os by two silver sutures.

Jan. 2. Slight hemorrhage, arrested by cotton wad saturated with astringent; patient recovered from anæsthetic without nausea or depression; vagina cleansed daily by tepid injections.

Jan. 22. Left hospital, feeling strong and hearty.

April 3. Returns to report perfect health; has menstruated three times without pain.

Case IV.—Catharine D——, æt. 38, United States, housekeeper, admitted March 25, 1872. Diagnosis: hypertrophy of cervix. History: during last labor, six years ago, perineum ruptured, after which uterus began to descend, and, doubtless, hypertrophy of cervix resulted from friction. Symptoms: great pelvic tenesmus; bearing down pain and dragging sensation; general debility; repugnance to society; dementia. Physical signs: complete procidentia; cervix enlarged to four times its normal size. Treatment: the lower third of cervix was removed by scissors and tenaculum (March 26), under an anæsthetic, and (March 29) showing no tendency to form healthy granulations, another portion was removed.

April 16. Stump almost healed up; was operated on to-day to restore perineum.

Case V.—Bridget W.——, æt. 29, Ireland, housekeeper, admitted April 29, 1872. Diagnosis: hypertrophy of cervix uteri. History: patient has been married fourteen years; four children; last four years ago; menses always regular and painless; for nearly three years patient has suffered from a sense of dragging in the pelvis, also pain in back and side, and profuse leucorrhœa. Symptoms: as above stated, exaggerated; general debility; emaciation and dementia. Physical signs: uterus slightly prolapsed; cervix enlarged and conical; great tenderness of the parts. Treatment: the vaginal portion of uterus was amputated by scissors, and edges of mucous membrane, lateral to os, approximated by sutures.

May 7. Sutures were removed; primary union almost throughout.

May 15. Left hospital, feeling quite free from pain.

June 15. Reports herself in the best of health.

Case VI.—Elizabeth E——, æt. 37, United States, housekeeper, admitted May 13, 1872. Diagnosis: hypertrophy of cervix. History: married twelve years; has had four children; last, five years ago; for nearly four years has suffered from the whole list of pelvic troubles, pain, dragging, constipation, and painful menstruation. Physical signs: greatly indurated and enlarged cervix, and slight prolapsus. Treatment: amputated by scissors; edges approximated by sutures.

May 20. Sutures removed; stump almost healed.

May 28. Left hospital, improved in general health, and no pain or tenderness.

MALE CATHETERISM.

By F. K. Bailey, M. D.,
Of Knoxville, Tennessee.

Among the "accidents" to which man is liable, retention of urine is comparatively rare. When we consider how easily the outward passage of the urine may be obstructed, the infrequency of such a contingency is surprising.

A happy exemption it is, for nothing is more distressing to endure, or more certainly fatal, unless promptly relieved.

Directions, more or less in detail, are given in the standard works on Surgery, and, to the casual reader, nothing could seem more easy of accomplishment than the passage of a catheter.

While a medical student at the Castleton (Vermont) Medical College, in 1836, Professor J. H. Armsby gave the class an opportunity to practice upon the cadaver, and quite a proportion failed to reach the bladder. The first difficulty was to pass over the arch of the pubis. The catheter encountered folds in the mucous membrane, which acted as an impediment, even before reaching the arch.

The instructions given by the Professor

were to put the penis upon a stretch, so as to give a directness to the tube. This was not only enforced upon the first introduction of the catheter, but also after it had passed the arch of the pubis. The tendency to "telescoping" obtained through the whole canal, and it was by observing the caution above mentioned that I was one of the successful pioneers in that trial.

In all subsequent cases coming under my care the same rule has been strictly observed, and its importance appreciated. Especially in old men do we find it important to remember how spongy and loose the whole parts are. In the summer of 1870 I was called to see an old negro, who was suffering from retention of urine from the recurrence of an old difficulty, which he had been told was stricture. I was informed that he had not passed water for many hours, and that two or three physicians had tried, during the day, to relieve him, but without success.

There was considerable hemorrhage, and some soreness in the organ. I found no difficulty in passing the pubis, but just before reaching the bladder there was an obstruction. The least degree of force applied caused severe pain and profuse hemorrhage. There was enlarged prostate, but the impediment was encountered before reaching that gland, and it appeared to be simply folds in the mucous coat; the flow of blood might have been from a wounding of the membrane by the point of the catheter.

I desisted for a while, and then after passing the arch, and before reaching the point of resistance, I grasped the penis firmly in my hand, and pulled upon it as strongly as practicable without actually tearing it off. While thus upon a stretch, the catheter was slowly and cautiously pushed along, and, after meeting with some resistance at the prostate, it entered the bladder.

I repeated the operation occasionally for a week afterwards, and was obliged to make the same traction in order to succeed.

The following case I will introduce, as perhaps illustrative of some of the above remarks.

March 8th, 1871.—J. M., æt. 82, in good general health, while riding to Knoxville yesterday, from his home, eleven miles distant, stopped by the roadside, when about half-way to the city, to urinate. He was unable to pass any urine, and was in a good deal of pain. At this juncture a physician happened to come along, who, seeing the condition of the old gentleman, proceeded to introduce a catheter, but was unable to pass it into the bladder. After some effort, which, as stated by the sufferer, caused blood to flow, he desisted, and advised him to proceed to town.

On his arrival he sent for Dr. J. M. Boyd, who, after an hour or more of effort, succeeded in the introduction of a catheter. About a quart of urine was removed, and great relief followed. To-day, at 1 P. M., Dr. Boyd made another effort to introduce the catheter, but without success. At 4 o'clock I was requested to visit the patient in consultation.

It appeared that one or more "pockets" had been formed, from which blood poured freely, and into which the catheter would seem to pass as it was introduced.

Dr. Kennedy, partner of Dr. Boyd, was in attendance, and we all alternated in efforts to introduce the instrument. At length Dr. Boyd succeeded, having, as it appeared, dodged the lateral sinuses. The instrument was then allowed to remain, and secured properly.

The patient, in consequence of extreme age, was necessarily much prostrated, and soon began to fail. On examination, the prostate gland was found enlarged to the size of a goose egg.

The instrument was not withdrawn until the 12th. But little difficulty was found in introducing it afterwards, but the patient soon began to fail in strength, and died in less than a week after reaching town.

May 4th, 1872.

CASE OF A HEART COVERED WITH A SHELL OF BONE.

By Dr. Norman Gay,
Of Columbus, Ohio.

(Read before the Ohio State Medical Society, June 12, 1872.)

Mr. A., æt. 28 years, came into the Hospital of the Ohio Penitentiary, February, 1871, stating that he had liver complaint, and that he had been under treatment eight or nine years before he came to the Penitentiary, for disease of the liver.

On examination we found the lower margin of the liver on the right side five inches below the ribs. He had the appearance of a case of fatty degeneration of the liver.

After some months we found he had tubercular disease of the left lung. Dropsy came on in abdomen and lower extremities. He was relieved from time to time by the usual remedies, but the effusion soon returned, and he died from exhaustion on March 17th, 1872.

Post-mortem by Dr. CLARK, Superintendent of the Ohio Penitentiary Hospital: The liver near twice its usual size, and a well-marked specimen of what is known as a fatty degeneration of liver. There were also large masses of tuberculous deposit in different points, which, I should judge, were of subsequent date to the fatty disease, and had been deposited since his confinement in prison. The other viscera of the abdomen were quite healthy.

The left lung was filled with tubercular deposit, with a large abscess and adhesion of pleura.

The muscular system was in good condition, well developed and good color, much better than I expected to see in one who had been so long sick.

In continuing our examination of the chest, we found an unusual heart which I now show you.

The bone covering the anterior and part of the posterior surface of the heart measures transversely 4½ inches, vertically 5½ inches, extending over the apex and upon posterior surface 1¾ inches, and in many parts an eighth of an inch in thickness and very firm. On the line opposite where the two ventricles are attached the bone is quite thin anteriorly and posteriorly.

From examination of where it is sawed into, I should judge the bone was developed in the posterior layer of the pericardium, but as we get to the posterior part of the heart, we find no appearance of pericardium. From its appearance I should judge this was congenital, and not a transformation of the pericardium.

On the right side the pleura is healthy, with no diseased attachment to the bony case; anteriorly and posteriorly, then, there was no appearance of disease. The cavities of the heart were larger than usual, the valves all healthy. The sounds of the heart were always natural, but feeble; impulse slight. The action of the heart was always regular and slow; good circulation of extremities. Had great difficulty in breathing after the lung became affected, but not before.

REMARKS ON AMPUTATIONS.

By Dr. R. S. CONNOR.

(Before the Delaware State Medical Society.)

The speaker agreed in the main with the views expressed in the excellent paper just read, and was glad to hear again a good word spoken for the circular method of operating, a method that had for a time very largely fallen into disuse, but that had during the last few years been to a considerable extent regaining its former importance. Besides its advantages as set forth in the report, it had an additional one in that there was avoided the possible risk in the flap operation of locking the knife in the fragments of bone in cases of compound, especially gunshot fractures, an accident involving trouble and mortification to the operator, as the Doctor had himself seen.

He could not endorse the views of the reporter on the subject of the modified circular operation, believing it to be decidedly preferable to the ordinary circular, inasmuch as it prevented the formation of the projecting corners, that are both unsightly and annoying, sometimes having a positive influence in retarding the cure.

The objection to it that it increased the extent of cicatrizing surface, he could not regard as one of much weight. Certainly the best stumps that he had himself made, and the best made by others that he had seen, were by the modified circular method.

But, after all, the method of operating was generally determined by the necessities of the case and the prejudices of the operator. Unquestionably, in some localities the flap is decidedly preferable to the circular, and the speaker could not understand the preference expressed by some writers for the circular in the forearm and leg. As respected hip-joint operations, he must differ from the author of the report in his estimation of Lacauchies' method, for, in some cases hemorrhage, at the time of the operation, is the cause, ultimately, of the fatal result; and by Lacauchies' method the bleeding can be readily and very largely controlled by pressure upon the femoral, just below Poupart's ligament.

Respecting ankle-joint operations he felt compelled to express an unfavorable opinion, and would in his own person prefer amputation through the lower part of the leg. Between the Syme and Pirigoff operations he preferred the latter, for, if successful, the

stump is slightly longer and decidedly firmer; but, as expressed in the report, caries may be developed and a failure of the operation result in consequence. He had heard the great British advocate of the Pirigoff operation, Sir. Wm. Fergusson, maintain its value and advantages, and on the same day saw him compelled to re-open two carious Pirigoff stumps of his own making, and saw off slices of bone; in other words, make a secondary operation two months after the primary.

The speaker was disposed to consider favorably the idea of regarding the foot and hand each as a single structure, and amputating at whatever point might be necessary, without regard to the various articulations.

Hospital Reports.

UNIVERSITY OF MARYLAND HOSPITAL, BALTIMORE—SERVICE OF PROF. J. J. CHISOLM.

Fracture in the Middle of the Humerus from Muscular Effort.

J. G., aged 32, a stout, healthy mechanic, a bricklayer by trade, presented himself at the Hospital to have his arm set for fracture in the middle third of the right humerus. The fracture was a simple one, easily diagnosed, nearly transverse in direction, so that there was no lateral displacement, therefore no riding of fragments nor other deformity. The limb was much ecchymosed, both on the inner and outer side of the arm, leaving the whole region of skin over the biceps and triceps muscles white, in marked contrast with the discolored surfaces on the inner and outer sides of the arm, reaching from near the elbow to the armpit on the one side, and to the spine of the scapula on the other.

The following is the history given:—

"I am perfectly healthy, pursuing my daily avocation of bricklaying. Yesterday, having worked all the morning, I was returning to the building after my midday meal, when, in passing a brick pile, I took up a brick, and as I had often done before, in a playful mood, I pitched it at a fellow-workman who was standing on the opposite side of the street. Instantly I heard and felt something give way in my arm, and it fell to my side powerless and painful. I have never had syphilis, and consider myself a perfectly healthy man."

Cases of fracture of the long bones from muscular action are so very rarely met with, that cases as above cannot fail to interest our surgical readers.

Medical Societies.

Proceedings of the Ohio State Medical Society.

(*Reported for the* Medical and Surgical Reporter, *by* Dr. J. W. Radlock, *Secretary.*)

The Ohio State Medical Society met at Portsmouth, Ohio, June 11th, Dr. W. W. Dawson, of Cincinnati, President, in the chair.

An address of welcome was delivered by Dr. A. B. Jones, of Portsmouth.

After some preliminary business, volunteer papers being called for, Dr. Bartholow announced a paper on "*Aneurism of the Basilar Artery.*"

Dr. E. Sinnet announced a volunteer report of "*Two Cases of Monstrosity.*"

Dr. Gay presented a pathological specimen, with history of case, of heart incased in bony formation. Remarks were made on the case by Drs. W. W. Seely and J. T. Whittaker. In answer to Dr. Bartholow, Dr. Gay stated that a specimen of the bony case had been subjected to microscopical examination, and found to be true bone.

The following named gentlemen were favorably reported on for membership, and unanimously elected: — Robert Wesley, Athens; D. T. Davis, Dayton; W. V. Peck, New Richmond; Thomas G. Vaughters, Portsmouth; David Coleman, West Union; J. L. Wylie, Ripley.

The President announced the Committee on Finance, as follows:—Drs. Jones (of West Liberty), E. B. Stevens, D. D. Bramble, C. M. Finch, and E. Jennings.

In the afternoon the following names were presented for membership, and unanimously elected:—A. Andrus, D. W. Coffee, both of Westerville; B. F. Kitchen, Clay P. O.; James L. Taylor, Wheelersburg; J. A. Warren, Wheelersburg; W. A. Frizzell, Buena Vista.

A question here arose as to the status of members of this Society who came as delegates from auxiliary societies. On motion of Dr. Miles, the subject was referred to Committee on Medical Societies.

Dr. L. A. Grimes, of Concord, Ky., and Dr. C. Honaeker, of Vanceburg, Ky., were here introduced, and invited to take seats with the Society.

The Finance Committee here made a partial report, recommending more rigid economy in getting out "The Transactions;" the Treasurer to have a salary of $150 a year; the Secretary to have no salary, but his travelling and incidental expenses to be paid by the Society; annual dues to be $3 a year. Report received.

Dr. Gray moved that the salary of the Treasurer hereafter be $50, instead of $150. Carried.

Dr. Kincaid moved that the annual dues be fixed at $2, instead of $3, as recommended by the Committee. Carried. Report was then adopted.

Dr. J. B. Thompson here offered his resignation as Treasurer. Resignation accepted,

and Dr. Gray elect d Treasurer of the Society.

The President announced the Committee on Medical Societies, as follows:—Drs. A. C. Miller, Miles, Wylie, Hough, and Hyatt.

Dr. J. B. Thompson resigned his place as Librarian, and Dr. Gray, Treasurer elect, resigned his place on the Committee on Admissions.

Dr. E. Sinnett moved that a vote of thanks be tendered to Dr. Thompson for his long and useful services as Treasurer of the Society. Motion heartily responded to.

Reports of Special Committees.

Dr. S. Scovill, of Lebanon, having previously been announced, read a report on "*Nervous Transmission.*" The report was elaborate, read with energy, and listened to with marked attention by the members of the Society. Remarks on the report were made by Drs. Whittaker, Hough, and Scovill; after which the report was received, and referred to Committee on Publication.

Dr. R. Bartholow read a report entitled "*Some Points in the Therapeutics of Electricity, Illustrated by Cases.*" The report was well received, and listened to attentively by the members. Remarks on the report were made by Dr. Reed, who reported cases confirming the position taken by the author of the report on the value of electricity as a therapeutical agent. Drs. Hough, Whittaker, Miller, and Scovill, also made remarks touching the report. Report received, and referred to Publication Committee.

Dr. Landon moved that the Society take a recess until half-past seven o'clock in the evening. Carried.

Evening Session.

Society called to order by Vice-President Dr. C. P. Landon.

Reports of Special Committees Continued.

Dr. A. T. Keyt read a report on the "*Semiological Value of Yellow Elastic Tissue in Sputum.*" The report, although lengthy, and occupying the major part of the evening in its reading, was listened to throughout with marked and critical attention by all present. Report received, and discussed by Drs. Bartholow and Whittaker; whereupon it was referred to Committee on Publication.

Dr. P. S. Conner read a report on "*Hernia Cerebri.*" Referred to Committee on Publication.

The Society then adjourned, to meet Wednesday morning, at 9 o'clock.

Second Day.

After some miscellaneous business the Committee on Medical Societies made their report, and resolved as follows:—

Resolved, That delegates representing Auxiliary Societies in good standing shall, upon satisfactory evidence, be entitled to take part in the deliberations of said State Society during the session for which they were elected, but shall not be entitled to membership or other considerations unless they become a regular member of this Society, and pay the usual initiation fee.

Election of Officers.

The following officers were elected for 1873:—

President.—Dr. A. B. Jones, of Portsmouth.

Vice Presidents.—Drs. A. Blymer, Delaware; J. D. Cotton, Marietta; W. J. Anderson, Newtonville; J. B. Hough, Ridgeville.

Treasurer and Librarian.—Dr. S. S. Gray, Piqua.

Secretaries.—Drs. J. W. Hadiock, Cincinnati; W. J. Conklin, Dayton.

Dr. J. B. Hough, from Special Committee, read a report on *Medical Chemistry*. Report received, and discussed by Drs. Conner, Kincaid, Scoville, Miles, Bing, Hyatt, Gordon, Reed and Fizzell. At the close of the discussion Dr. Hyatt introduced the following resolution, which was unanimously adopted:—

Resolved, That the sense of this Society is, that a better knowledge of Medical Chemistry, on the part of students preparatory to entering the profession is demanded, and that the profession of Ohio is pledged to the work of bringing about a reform in this department of medical education.

Dr. W. W. Seely read a report from Special Committee on "*Otology.*" Report received and referred to the Committee on Publication.

Dr. Gay, of Columbus, presented to the Society specimens of wire gauze apparatus for treatment of fractures.

The President announced that owing to the amount of business before the Society Dr. Bartholow withdraws his paper on "*Aneurism of the Basilar Artery.*"

Dr. A. Andrus read the report of a case showing the front surface of a body studded with tumors varying in size from a pea to a walnut.

Report received, and discussed by Drs. Dunlap—who reported a similar case—Hyatt, Miller, Bartholow, Sinnett and C. P. Landon.

Dr. Miller, with remarks, reported a case which much resembled the case of Dr. Andrus. Dr. C. P. Landon, having seen the case of Dr. Andrus, in consultation, gave it as his opinion that the tumors were due to scrofulous or tuberculous deposits. Dr. Bartholow spoke of the cases as possibly multiple adenoma which was known to be a very dangerous form of disease.

This view was doubted by Drs. Andrus and Wisler.

Third Day.

Dr. Thad. A. Reamy exhibited an instrument of his own invention, for intra-uterine medication.

He thanked Prof. P. S. Conner for valuable suggestions, during the time he was preparing his instrument. At the close of his

remarks Dr. Reamy said he hoped the Society would accept this report in lieu of the report which he was posted to have.

Dr. G. S. B. Hempstead was at this juncture elected an honorary member of the Society. Dr. Hempstead retired from practice fourteen years ago, after having practiced forty-three years. He was one of the Original Members of this Society, was its President in 1855; and is now its oldest living member, having attained the advanced age of seventy-eight years.

The Finance Committee reported in the case of Dr. McClain, in favor of his reinstatement upon his paying into the treasury two-thirds of the amount he owes the Society. Report received and adopted.

Dr. J. T. Whittaker read a report from Special Committee on "*The Year's Contributions of Physiology to Practical Medicine.*" Report received and referred to Committee on Publication.

Dr. L. M. Jones, of West Liberty, read a report from Standing Committee on *Obituaries*, in place of the Chairman, Dr. B. B. Leonard, who was not present. Report received, and, after some remarks by members to the effect that the report was not comp'ete, since it did not embrace a notice of all who have died of our number the past year, was adopted.

Dr. E. B. Stevens moved that a committee be appointed to report on the death of our late secretary, Dr. W. C. Hall. Carried. The President appointed Dr. Stevens as the committee.

Dr. C. A. Miller was appointed a committee to report on the death of Dr. Cary, of Salem.

Dr. Alex. Dunlap was appointed a committee to report on the death of Dr. Kyle, of Xenia.

Dr. A. B. Jones requested that his report from Special Committee on "*Relation of the Mental to Man's Physical Forces*" be read by title and referred to Publication Committee. On motion of Dr. Bing it was so read and referred.

A communication was here received and read by the secretary from Dr. George Mendenhall, embodying the following resolutions:—

Resolved, That a committee of five, of which Dr. Clendenin be chairman, be appointed to prepare a memorial to the Legislature of this State, on the subject of Public Health, in accordance with the resolution of the American Medical Association, presented by Dr. Thomas M. Logan, of California.

Resolved, That this committee co-operate with Dr. A. E Jenner, in reference to the bill presented by him in the Senate of Ohio.

Resolved, That this committee shall prepare a suitable memorial, and have five hundred copies printed and distributed to the members of this Society for signatures; and draw upon the treasurer for the amount expended for same.

Dr. Miller stated that Dr. Joel Pomerine had a report ready from the Special Committee on "*Puerperal Convulsions*," but was unable to be present to read his report, and, therefore, requested to be continued on the same committee until next year. By vote of the Society Dr. Pomerine was continued as he requested.

President Dr. Dawson gave a synopsis of his valedictory address, which was well received. The subject was that of medical education. The annual wail and lamentation on that topic was not indulged in by the speaker; a more cheerful view was taken of the question. The speaker showed how rapidly we had advanced in that respect within the past twenty years; how our works on medicine were translated into foreign languages and read abroad. He also referred to the general diffusion of education by our system of public schools, and how they were auxiliary to medical education, by preparing the youth of our land with a thorough primary education.

On motion of Dr. E. B. Stevens the President's address was referred to the Publication Committee, with instructions to print.

After the delegates to other Societies had been appointed, and the various committees announced, the Society adjourned to meet in Columbus, on the second Tuesday in June, 1873. J. W. HADLOCK, M. D., *Sec'y*,

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Chenango County, N. Y., Medical Society.

The semi-annual meeting of Chenango County Medical Society was held at the Medbury House, in Sherburne, June 11th, 1872.

The Society was called to order by the President, Dr. HORACE HALBERT.

On motion, it was

Resolved, That in accordance with a suggestion of the State Society, a committee be appointed to consider the propriety of adding an article to the by-laws to provide for the preliminary examination of all persons proposing to study medicine and surgery previous to their admission as students into the offices of members of the Chenango County Medical Society.

Drs. George Douglas, E. S. Lyman and W. H. Stuart were appointed members of said committee.

The Society listened to the reports of the delegates to the several County and State Societies and the American Medical Association. The sanitary reports of different localities were attended with more than their usual interest. The epidemic of cerebro-spinal meningitis occurring since the last annual meeting of the Society, was fully and ably discussed. The presentation of cases, and general experience of the profession in this locality, seemed to teach that in the treatment of this truly most formidable disease the indications are to produce perspiration by the most available means, and to give tonics, stimulants and anodynes in large and oft repeated doses. The history of a number of cases of puerperal convulsions was given, in which the most happy results followed the free use of the lancet and the bromide of potassium.

An able paper was read by Dr. J. T. Jameson, on the treatment of anasarca following scarlatina. On motion, it was

Resolved, That the paper of Dr. Jameson be referred to the State Medical Society, with the request that it be published in the transactions of said Society.

Dr. E. S. Lyman extended an invitation to the members of the Society and all physicians present to take tea at his house at six o'clock P. M. On motion, the invitation was duly accepted. Attention was called by Dr. S. F. McFarland to a case of *placenta previa* which, at its fifth month, resulted in miscarriage, and also to a case of paralysis of the vocal cords, discoverable only by a careful use of the laryngoscope.

EVENING SESSION.

The Society met pursuant to adjournment and proceeded to Union Hall to listen to the semi-annual address delivered by Dr. Wm. D. Purple. The Doctor presented, in an able and forcible manner, his subject: "Medicine as a Science and an Art." The aptness of his illustrations and the clearness of his conclusions well deserved the careful attention of his audience, while his position as the oldest member of the Society gave additional weight to his advice to the younger members of the profession.

On motion, the Society adjourned to meet at the American Hotel, in Norwich, on the second Tuesday in October, 1872.

D. M. LEE, M. D., Secretary.

Tompkins County, New York, Medical Society.

The Tompkins County Medical Society met at Ithaca, New York, June 20th. The Society was called to order by President MOE.

Dr. S. P. Sackett read an interesting paper on

PROGRESS IN OBSTETRICS AND SURGERY.

In common with many others I now believe that we are able to do more to mitigate the pains of child-bearing with the use of medicine than was formerly done. During the past ten years I have given belladonna in small doses, daily, to pregnant women about two weeks previous to their confinement, and have observed its effects upon about 75 to 100 cases annually. I believe that it facilitates labor, perhaps, because it relaxes or renders inert the circular muscular fibres of the uterus. It should not be given too freely, as I think that it has had the effect in some cases of prolonging the period of utero gestation.

During labor, medicines are given to relieve pain more than formerly. Some use chloral, though I am not aware that its use is on the increase. One physician has suggested to me that it had the effect to stop flowing; it will be well for us to note carefully any such effect. The use of anæsthetics in obstetrics is probably not much on the increase; but those that have used them seem to be generally satisfied with the effect. Whisky and chloroform given together internally are used and recommended, to what extent I am not prepared to say.

My own observation leads me to prefer morphine to any other agent for ameliorating the sufferings of labor. I am aware that it may justly be said to retard, in many cases, the progress of labor, but my observation leads me to conclude that in very many cases it may be given to the extent of evident relief to pain, without in any degree delaying the final favorable termination. Some have said that it makes the pains more efficient; perhaps it does where there is a rigid os; but it may be given with advantage in other cases. If I see a case but little advanced, and advancing quite slowly, so that it is likely to still last some twelve to fifteen hours, I would always give a dose of morphine, perhaps large enough to induce sleep, there would still be the same slow progress in the case, and finally a few efficient pains at the last would effect delivery at the time when it was likely to occur without the opiate, but the woman would suffer less and be less exhausted. I sometimes give morphine, one or two $\frac{1}{8}$-gr. doses, where the pains are severe, near the termination of labor, rather with the design of a little present relief, and also of having the patient comfortable after the child is born. We should be not only anxious to deliver the woman, but also should be careful, if the constitution is weak, that the *shock* is not too great for the woman to bear.

Of the hypodermic injection of morphia I can say but little from observation, but I think that hereafter it will be frequently used. For example, in some cases a desirable state of quietude of the uterus was induced where the liquor amnii had passed, and it was desirable and necessary to turn and deliver the child.

My own opinion is rather favorable to the use of the forceps in many difficult cases. I am led to apprehend, however, that the danger of laceration of the perineum is increased by its use. I suspect that they are more used also than formerly by the profession generally. The paper published in our "State Transactions," written by Dr. C. C. P. Clark, upon this subject, is a useful and instructive one, and will have its effect upon the profession. Disregarding the directions of authors, he says that in conducting the blades along the pelvic passage, and in grasping with them the head of the fœtus, we should disregard entirely the presentation, and have regard only to the curve of the vagina and the contour of the pelvic cavity. His opinions, at least, correspond with my own, and I am confident that old practitioners will generally indorse them.

I think that the use of the perforator, and the frequency of embryotomy, has been gradually reduced to a minimum in obstetric practice; but there has been an improvement in instruments used for the purpose. The cephalotribe of Assulini has been so much improved that by its aid, women whose pelves measure but little more than

one inch in the conjugate diameter, have been safely delivered of children at full time. The cases, however, are so very rare where the use of these appliances are required, that it is scarcely possible that any of us will become adepts in the use of the craniotomy, saw, forceps, etc., which have been invented.

Dr. Braxton Hicks demonstrated, a year or two ago, that in cases where the child lays with its long axis crossways, version may be effected by combined external and internal manipulation; but I must confess that, however it may be with others, I have been obliged to introduce the hand into the uterus, and turn.

Cases of hemorrhage after parturition are now sometimes treated by the injection of a strong solution of the perchloride of iron, combined with carb. soda. I have not tried this, but I have sometimes made a tampon by wrapping a few grains of this drug in muslin, and the effect has been all that I desired.

Cases of dropsical accumulation during pregnancy, etc., are now said to be cured by the continued use of chlorate of potassa; to what extent it has been successfully tried I am not aware, but I shall probably use it hereafter.

Perhaps I should also mention bromide of potassium as a remedy, used with success, of late, in many cases of puerperal convulsions, also large doses of veratrum viride in the same disease.

I will briefly refer to some innovations in the practice of surgery.

Perhaps it is worthy of notice here, as relating both to the practice of obstetrics and surgery, that a case of rupture of the uterus is reported, where the life of the woman was saved by the abdominal section.

The practice of skin grafting, though new, is a successful mode of facilitating the healing of old ulcers, and should be adopted in suitable cases.

Hip disease is successfully treated by extension, in conjunction with such means as were formerly used, tonics, counter-irritants, etc.

Inverted toe nail is cured by compression with adhesive plaster.

Torsion of arteries is often successful in arresting hemorrhage, and is sometimes the preferable mode.

Amputation is sometimes performed upon a plan combining both the circular and the flap methods.

The standing posture is now said to be the best position for reducing an inguinal hernia.

In cases of retention of urine, where there is prostatic enlargement, the instrument invented by Dr. Squires, of Elmira, called the prostatic vertebrated catheter is a very useful one.

Gonorrhœa is successfully treated by the application of pounded ice to the perineum, but little medicine being used.

Carbolic acid is used as a local anæsthetic; after its application slight incisions may be made with comparatively little pain.

Cotton wool is regarded as among the best surgical dressings.

Dr. Nucomb, of Cornell University, and others, then entered into a discussion on the treatment of eclampsia. Dr. Nucomb gave it as his opinion that bleeding was only good treatment in patients of full habit of body; he further stated the prevalence of child-bed eclampsia (eclampsia gravidarum parturientium) in San Francisco, California, where he formerly practiced for a period of ten years. He said that he had seen no less than fifteen cases each year while in that city, in his own practice, and as counsel with other physicians. He claimed that climatic influence no doubt was the cause of the frequency of this disease on the Pacific Coast. His remedy was principally chloroform, and the recoveries were uniformly rapid with this treatment. He controlled the spasms for some two or three days with the anæsthetic, and found as a rule the case terminated favorably without any further medication.

Dr. Nucomb also reported a case of complete eversion of the womb. An ignorant doctor was in attendance as midwife, and the placenta not coming away as soon as he desired, pulled upon the cord so hard (the after-birth adhering to the uterus) that the womb was turned inside out. The husband knocked the quack down, and sent for Dr. Nucomb, who removed the placenta and reduced the womb to its normal condition.

Dr. Lewis then reported another case of inverted womb, in the town of Enfield, which was operated upon successfully by Dr. White, of Buffalo, after being turned out some six weeks.

Dr. M. M. Brown then gave the history of several cases of spermatorrhœa and impotency, which he had treated successfully with bromide of iron, bromide of potassum, and tincture of muriate of iron. He exhibited an ingenious apparatus for preventing nocturnal emissions, manufactured by a student who was afflicted with impotency. It consisted of a small block of pine wood covered with sheep skin, wool side out, which was placed upon the perineum. To either end of this compress was fastened a leather strap; to the strap in front was fastened another, one passing over each shoulder, then coming together in the middle of the spine, was fastened with a buckle to the single strap that passed up from the posterior part of the perineum. When an erection was taking place the patient claimed that he involuntarily straightened his body, and thus tightened the straps, and made compression on the arteries, thus preventing the flow of blood into the penis. The patient stated that it worked like a charm, and as long as he wore the appliance he was not troubled with emissions. Dr. Brown also reported his treatment for rupia and eczema, which had proved very successful. It consisted of fluid extract of rumex crispus, pipsissewa, with iodide of potassium, syrup of sarsaparilla, with supporting treatment, viz., muriated tincture of iron,

quinia, etc. Local treatment: acid carbolic, tar, adeps, and simple cerate.

Dr. Farrington read an interesting paper on the application of new remedies in the treatment of diseases. He did not feel to give that credit to hydrate of chloral and carbolic acid that writers and authors of medical books did, but found in these remedies enough value to place them among the large list of excellent medical discoveries.

He had tried chloral in incontinence of urine, but no benefit resulted. It had been recommended as a topical application in painful diseases, but he had had no experience in its use. He would not recommend more than 15 grains to be given at a dose; as many cases had been reported as proving fatal where large doses had been administered.

The Doctor recommended raw beef as an excellent remedy in sickness of stomach in pregnant females. Also stated that he was favorably impressed with the use of hypodermic injections in case of enlarged tonsils. He made a solution of 2 grains iodine and ℈2 iodide of potassium, with aqua font. 1 ounce. He injected this, three times a day, directly into the tonsil. Had treated his own son successfully in this manner.

Recommended ipecacuanha as an excellent remedy in hemorrhage.

For chorea gave hydrate of chloral.

Recommended turpeth mineral (yellow sulphate mercury) in membranous croup.

Recommended ergotine for hemoptysis.

Painful menstruation and scanty flow relieved by sitting over aqua ammonia.

Dr. Fitch recommended as a hypnotic 12 grains bromide of potassium with 7 grains of hydrate of chloral.

Dr. Nucomb being called upon, gave a very interesting account of his experience in Oahu, one of the Sandwich Islands, in a small-pox epidemic. He stated that thousands of natives were vaccinated with rupia crusts, or scabs, and the result was fearful, causing many deaths, not only from the poison introduced into the system by the quack vaccinators, but from the ravages of variola, none being protected. He said many patients threw themselves into the streams throughout the Island when the fever set in, and it was common to see scores of dead in the rivers and along their shores. In this epidemic quite one-third of the population was destroyed by this terrible disease. He recommended thorough vaccination.

The meeting was one of the most interesting we ever enjoyed. Annual meeting the 19th of December next.

M. M. Brown, M. D.

Editorial Department.

Periscope.

A New Method of Treating Hydrocele.

Mr. S. Messenger Bradley, F. R. C. S., Manchester, says, in the *British Medical Journal*:—While the various plans of treating hydrocele hitherto recorded possess the prestige of a high antiquity, they all alike suffer from being occasionally unsuccessful, or even hurtful, in their results. These objections hold good, though in a less degree, in speaking of the treatment by tapping and injecting the vaginal sac, which has practically superseded all other modes. This operation, first recommended by Celsus, who advised nitre as the best injection, fell into a long desuetude after his death, until revived by Monro the elder, and of late years popularized by Sir Ranald Martin, whose claim to originality lies in his choice of iodine as the most suitable stimulating agent. Other plans are, however, resorted to from time to time, either from their greater safety and simplicity, or from the occasional failure of the iodine treatment. Thus, briefly to summarize these methods, we have—1, *treatment by acupuncture*, recommended by Lewis, and still sometimes adopted and found to succeed in cases of congenital hydrocele; 2, the mere *application of an evaporating lotion*, such as muriate of ammonia, vinegar and water, which, it is probable, has only been found of service by Keate, who, I believe, was the first to recommend it to the profession; 3, *simple tapping*, nearly always failing to effect a cure, and not always without danger, inasmuch as it is sometimes followed by a hæmatocele, or even sloughing of the scrotum; 4, *laying open the sac*, a plan approved by the fathers of medicine, but abandoned by their descendants of the present day; 5, *excision of a portion of the tunica vaginalis*, which has, in having been practiced by Albucasis, an almost equal antiquity with the one last mentioned, and has met with quite an equal neglect; 6, the plan of *evacuating the fluid and introducing some caustic on the end of a probe*, of which Paulus Ægineta writes in warm praise, and which, though occasionally adopted, as Humphry states, at the present day, is not likely either from its success or safety to become more general than it deserves; 7, *the introduction of a tent into an open wound*, as performed and praised by Paré, Baron Larrey, and others; and 8, the somewhat similar plan,

still, I believe, commonly practiced by the Arabians, who were the first to adopt it, of *passing a seton through the vaginal sac, and there retaining it for twenty-four hours.* It is likely enough that this operation would succeed in cases which resist all milder treatment, but, from the by no means trifling danger attending it, it should not be resorted to if we can equally achieve our object by a safer mode of procedure; and this, I believe, can be done, as I will endeavor to show.

It very frequently happens that a hydrocele must be treated, if treated at all, in the out-patient department of a hospital or at the surgeon's residence; that is to say, at a distance from the patient's own home. Now the disadvantages arising from this fact are, that the walk home after operation is apt to induce considerable and even dangerous inflammation, or that a hæmatocele ensues as the result, not necessarily of wounding the testicle, but of a dribbling from the scrotal veins, which are turgid from their dependent position.

Pondering these circumstances, and also reflecting upon the fact that the walls of pyogenic membranes, such as those of abscesses, sinuses, and the like, will often agglutinate when brought into firm and continued apposition; and remembering, at the same time, that the serous tunic of the testicle is, from its physiological nature, liable to take on adhesive action, and that, from the character of the secretion poured out in a hydrocele being inflammatory and not dropsical, it would even be prone to do so, I was led to the inference that simple tapping, followed by firm and equal strapping of the affected side, would probably be followed by an obliteration of the vaginal sac and a consequent radical cure.

It was not long before I was enabled to test the accuracy of this reasoning. A medical man applied to me with a large simple hydrocele, which had been tapped several times, and the last time injected with iodine without success. After explaining my object to him, I tapped the hydrocele, drawing off half a pint of fluid, and tightly strapped the affected testicle with soap-plaster. This was done at my own house, and the patient walked home, a distance of about a mile, immediately afterwards, and continued to go about during the process of recovery, which probably took place in about ten days; I say probably, as I kept up the pressure for three weeks without allowing the testicle at any time to remain unsupported. This case occurred eight months ago; since then I have followed the same course in three other instances, and in each with an equally satisfactory result. In no case was there any fresh effusion of fluid. Another case which came under my notice was of some interest in illustrating the advantages of strapping in what would beforehand appear quite unfavorable circumstances. A man came to consult me about a recent hydrocele of some magnitude; a tapped and emptied the tumor, but did not strap it at the time, as there was a strong force of pediculi encamped in the pubic and scrotal hair; ten days afterwards he visited me again, having got rid of his unwelcome guests, but with his tunica vaginalis as much distended as ever. I again tapped him; but, though I do not think I wounded the testicle, which could be plainly enough seen at the back of the tumor, I did not succeed in drawing off any fluid worth speaking of; nothing followed, indeed, but a few drops of bloody serum. In three days he came again, with his scrotum larger than ever. The tumor had now, however, changed its character; it was no longer transparent and pear-shaped, but opaque and rounded; it had also become very heavy, and much more painful than it had ever been before. In other words, a hæmatocele had formed. Without the anticipation of much good resulting, I resolved to try the effect of strapping in this case; suffice it to say that this proved effectual, not only in causing the absorption of the vascular extravasation, but also in permanently curing the hydrocele.

Ringworm Caught from a Cat.

Prof. L. P. YANDELL, Jr., M. D., Professor of Materia Medica and of Clinical Medicine in the University of Louisville, reports the following case in the *American Practitioner*:—

I was called in March to see the child of Mrs. M., aged ten years. Found upon head, neck, shoulder, and arms, a dozen or twenty circular, oval or crescent patches of tinea circinatus. Mrs. M. was impressed with the belief that her child's disease had come from a pet kitten, upon whose body were a number of scabs. Within a week a similar eruption appeared upon Mrs. M., which still further convinced her that the disease was contagious, and had its origin in the cat. Strong carbolic acid was applied to the patches in both cases, which was followed by satisfactory cure. At the suggestion of Mrs. M. I examined the cat. Its belly presented a number of large favus crusts, having the peculiar granular character, cup-shape, and pathognomonic odor. The crusts were not of so deep a yellow as I have seen in the human subject, but were rather of a cream color. Upon removing them a raw, inflamed and depressed surface was presented. A portion of the favus crust from the cat was examined under the microscope by Dr. Kastenbine, and showed a most beautiful and distinctly developed specimen of the achoreon schönleinii. I unfortunately failed to make a microscopic examination of the eruption on the child or mother.

The Antagonism of Fever and Cholera.

At a meeting of the London Epidemiological Society, the President, Dr. LAWSON, said: When a cholera epidemic approached a district in which fever was epidemic, cholera did not become general and frequent within

the fever field until the epidemic force of the latter was broken, and *vice versa*, fever, as an epidemic, did not penetrate a cholera field until the epidemic force of that gave way. Sporadic cases of either disease were often met with a long way within the limits of the field of the other, but they never became numerous until the epidemic force of the prevailing disease had much abated. In treating this subject, it was shown first, that as fever varied much from quarter to quarter, or ran from month to month, it was necessary to take it for periods short enough to bring out these changes, together with the concomitant differences in the frequency of cholera; secondly, as in an extensive district the diminution of fever and increase of cholera may take place at different points in succession, and occupy a considerable time from first to last; it is necessary to select areas so circumscribed as to present this change nearly at the same time over the whole; thirdly, as it was found that enteric fever followed a different course in its increase and decline from typhus and other fevers, and actually increased on many occasions along with cholera, it is requisite that the deaths from enteric fever be separated from those due to typhus and other fevers. To illustrate this question the deaths were taken from the quarterly returns for London for 1848–49, 1853–56, and 1865–68; and those for the principal Scotch towns for 1866, from the reports of the Registrar-General for Scotland. Up to 1868 the English returns included the deaths from all kinds of fever under the term typhus. To separate these into the two components noticed above, the admissions into the London Fever Hospital for the corresponding quarter and year were employed, and, as Dr. Murchison has shown that the percentage of deaths on the admissions in the typhus and enteric forms was almost identical, while very few deaths occurred in the fever hospital from other forms, the total mortality of London was divided between the two in proportion to the admissions to the fever hospital. Though this method be not altogether objectionable, yet, it is the only means available for the purpose, and it is believed it affords a fair approximation to the truth. In the Scotch towns the deaths are given under the designation of typhus, enteric, relapsing, simple continued, and infantile remittent. The typhus, relapsing, and simple continued have been taken together, also the enteric and infantile remittent. These will be indicated both for London and the Scotch towns by the terms typhus and enteric groups respectively. It was shown, that in London in 1848, and up to the second quarter of 1849, the deaths from the typhus group were evidently above the average, and that cholera did not attain great force until the third quarter of 1849, when the mortality from this group fell below it. In 1853 the deaths from the typhus group were high the first two quarters, and they fell considerably the last two, and in the fourth there was a little cholera. In the first two quarters of 1854 the mortality from this group rose again, and cholera almost completely disappeared, but in the third quarter when the fever mortality fell to half what it had been the previous one, a severe epidemic ensued. During the first three quarters of 1855, the typhus group caused a mortality about the mean, in the last it showed a disposition to rise, and during 1856 it remained high; at the same time cholera was prevalent in Northern Europe, but there was scarcely a trace of it in London. In 1865 and the two first quarters of 1866, the typhus group of fevers caused a mortality varying considerably, but in every quarter above the mean; in the last two quarters of 1866 this fell slightly below the mean, and was accompanied by the mildest epidemic of cholera experienced in this country. During 1867 and the first two quarters of 1868, the typhus group fluctuated about the mean, but in the third and still more in the fourth quarter of the latter year, the mortality from it increased; in 1867 there had been a considerable epidemic of cholera on the shores of the Mediterranean and in the South of Europe, which was to have been expected in this country in 1868; that year it will be remembered there were an unusual number of sporadic cases of malignant cholera in this country, but the disease never attained the development of an epidemic.

Reactions of Quinia and Morphia.

From an extract in the *American Journal of Pharmacy* we learn that Professor FLUCKIGER finds the practical limit of the reaction of chlorine water and ammonia upon quinia (green coloration) to be aqueous solutions containing about 1-5000 alkaloid. The brown coloration produced by the same reagents with morphia is visible in solutions of 1-1000 alkaloid, while the iodic acid reaction is observed in solutions ten times weaker. The coloration produced with morphia dissolved in 500 to 200 or less water will hide the green color of thalleiochin; but if the solution contains 1-1000 morphia and only 1-3000 quinia, the green coloration only will be visible. In a mixture of quinia and morphia, the reactions of either alkaloid with chlorine and ammonia may be produced, depending mainly upon the amount of morphia contained in the solution.

Dangers from Cathartics.

Lately, at a meeting of the Clinical Society of London, Dr. BÆUMLER communicated a case of enteritis, illustrating the dangerous effect which in cases of this kind may follow the use of the mildest purgative even after all acute symptoms have subsided. The patient, a young man aged 22, was taken ill, after some irregularity of diet, with symptoms threatening peritonitis. There were great pain in, and extreme tenderness of, the abdomen, with some distension, besides high pyrexia. With rest and opium, these symptoms subsided in a few days; and on the sixth day of illness a furred state of

the tongue, slight tenderness in the cæcal region, and constipation, were the only abnormal symptoms remaining; pulse and temperature being quite normal, and the appetite returning. On the following day, the bowels not having acted for five days, and the descending colon being filled with solid fæces, half an ounce of castor oil was given. No sooner had this commenced acting, than all the previous symptoms returned; the temperature again exceeding 102° Fahr., and the patient for some days being in a somewhat critical state. Gradually, however, the symptoms subsided. On the seventh day of this relapse the pyrexia declined, and the bowels, which had not been open since the action of the castor oil, moved spontaneously. From that day the recovery was uninterrupted. The President said that the question raised by the paper was, whether the contents of the intestine were more irritating than the medicine put into it for its removal. The latter appeared to have been so in the case before the Society.

Reviews and Book Notices.

BOOK NOTICES.

Lectures on the Principles and Practice of Physic. Delivered at King's College, London, by Sir Thomas Watson, Bart., M. D., F. R. S., etc. From the fifth revised and enlarged English edition. Edited, with additions and numerous illustrations, by Henry Hartshorne, A. M., M. D., etc. Philadelphia: Henry C. Lea, 1872. 2 vols., 8vo., sheep, pp. 880 and 992.

It is now about thirty years since Professor Watson (for it was in his professional capacity that these lectures were originally delivered) published the first edition of this treatise on practice. The changes which have since then taken place in our views of pathology and physiology have scarcely been greater than the alterations in our therapeutics. Hence little remains in these two bulky volumes to remind us of the comparatively slender octavo of the first edition except the graceful and easy style of the writer, his luminous expositions of his convictions, and his characteristic fidelity of statement.

This is to its credit, for the frequent changes mean that the work has been brought up to the present position of science. As the author himself remarks, "the present edition would be worthless if it did not differ much from the last." And when we add that the English edition has received a careful revision, not only by the author, but by his distinguished successor in King's College, Dr. George Johnson, and the American edition many additions from the able pen of Dr. Henry Hartshorne, we have said enough to show that "Watson's Practice" is destined to remain as great a favorite in the future as it has been in the past.

The subjects treated at greatest length by the American Editor are Medical Thermometry, the pathology of croup, the causation and prevention of yellow fever and cholera.

Of the general character of Dr. Watson's views of practice it is needless to say much. He represents the standard, moderate, orthodox school of English practitioners. He sedulously avoids all extremes and all hobbies. Of the two errors, he is more apt to retain the obsolescent than to endorse questionable novelties. Cautious and unenthusiastic, he is not a representative of the latest, though perhaps he is of the best school of therapeutics. He is not a nihilist in treatment, a mere believer in anodynes and expectation, as some other writers in the same field, easy to name, but has a positive and cheering faith in the value of drugs. Less diffuse and more critical than Aitken; not quite so scientific, but with broader views of treatment than Niemeyer; more definite and complete than Flint, his is a work on practice which all physicians will find it to repay them to read and to own.

Spectrum Analysis Explained. Illustrating its Uses to Science, and including the theory of Sound, Heat, Light and Color. By Professors Schellen, Roscoe and Huggins. Boston: Lee & Shepard. Pamphlet, pp. 94. Price 25 cents.

This is one of a series of popular scientific *brochures* published by the above firm under the general title: "Half-hour Recreations in Popular Science." It aims to set forth in non-technical language the principal facts observed up to this time in the uses of the Solar Spectrum in qualitative analysis. It is chiefly founded on the larger work of Prof. Schellen, noticed in these columns a few months since. Those who would acquaint themselves with the late progress and general results of this admirable method of investigation will do well to read the pamphlet.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, JULY 6, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

☞ Quite too many of our subscribers, many of them old, personal friends, are in arrears on their subscriptions, aggregating a large amount of money that we ought to have in order to a vigorous prosecution of our enterprise. These parties are requested to settle their accounts immediately, or at least communicate with us at once—for, instead of at present further enlarging our edition to accommodate new subscribers, we shall resort to the expedient of dropping the unprofitable ones, and putting their bills into the hands of a collector. * *

THE NATIONAL HEALTH COUNCIL.

The attempt to organize a body of physicians whose duty it shall be to take the requisite precaution to insure the highest possible degree of national health, embodies, certainly, one of the grandest designs to which our science has yet aspired. The benefits which such an enterprise—if properly carried out—will confer on the whole nation, are simply incalculable, and whatever assistance can be rendered it by individual members of our profession should most heartily be done.

Last year a committee was appointed on the subject, the chairman of which was Dr. T. M. Logan, of California, now President of the American Medical Association. This year he submitted a report, some extracts of which we take pleasure in laying before our readers.

He thus explains the general object of the council :—

"Earnest, combined action, not only in, but out of the profession also, is what is wanted to secure to the great masses of the people the first conditions of a sound sanitary state; to arrest the propagation of infectious disorders; to prevent overcrowding in dwelling houses, and overtasking in schools and manufactories; to furnish an adequate supply of fresh air and potable water, and otherwise to provide against the new dangers to health and to life which the progress of population, consequent upon the increase of wealth, is continually introducing. Without extrinsic aid, however, it is believed that we can effect comparatively but little. The influence and moral power even of medical men are limited, and it is in fact impossible for those in large practice, with all the anxieties which such practice necessarily entails, to give to questions of a public nature the time and consideration their importance demands. What seems to be required, therefore, to meet the necessities of the case, is a thoroughly well organized department of health, connected with Government, under the surveillance of this association, and charged with the duty of superintending a sanatory system, to which our Municipal and State boards of health shall be subsidiary, just as our County and State societies are to this organization.

"Through the instrumentality of such State boards of health as are now inaugurated in Massachusetts, California, Minnesota and Virginia, a body of medical men will be provided for, who will thus be enabled to withdraw from the engrossing demands of private practice and to devote themselves to the special study of sanitary questions; and in order to secure a constant supply of competent physicians to this end, there should be instituted in our medical schools full and complete courses of instruction in State medicine."

Dr. Logan does not intend that the knowledge of medicine shall be kept as an

esoteric art, but takes the only true position, and that is, that the public must share in this instruction. These lectures, he says:—

"Might be open for the instruction of the public generally, and particularly school teachers, trained nurses and sanitary inspectors. This proposition can the more easily be acted upon because our knowledge of the whole subject is now not only sufficiently advanced and possessed of scientific accuracy, but is also of a character that lends itself with peculiar facility to popular exposition. One great difficulty which officers of health experience everywhere is, that they rarely obtain official information of epidemic disease, even in their own districts, until they see deaths registered against it, when it is obviously too late to adopt measures for prevention. Now, if the intelligent co-operation of the laity was secured, not only would the obstructive effects of present ignorance and apathy, to a great extent, be got over, but, by wise and active combination, we would be enabled to crush out, in their very incipiency, those fearful infections which become almost uncontrollable if not checked in their very onset. There is no longer any doubt but that, whatever may be the vagueness of our conjectures or the strife of our controversies respecting the real nature of contagion, of air poisons or of marsh miasm—be they organic germs, capable of indefinite multiplication or proliferation, when once imbedded in an appropriate nidus; or be they new combinations of proximate principles generated out of death, decay and disintegration—sanitary science has, either by making their habitats untenantable and incapable of maintaining their noxious life, or by chemically decomposing them as morbific matter, in many instances disarmed them of their terrors.

"Typhoid fever offers, perhaps, the most striking illustration of this position. Not only is the law of its propagation perfectly understood, but the excreta by which almost exclusively its deadly germs are sown throughout society are, on their issue from the body, entirely within our control. To disinfect these excreta has been found almost infallibly to prevent the fever from spreading. The same may be said in regard to Asiatic cholera. The subtle and volatile poison of scarlatina is disarmed of its virulence by guarding against its desquamative scales during convalescence. The limitation of diphtheria, by precautions of a similar nature, in well ordered households at any rate, is a matter of the greatest certainty.

"Diffuse the discovery of the means of protection against these and many other diseases, which have been perfected under the vigilant outlook and investigation of combined chemical and microscopic detectives; extend what has been successfully applied to circumscribed communities, to States and to nations; let facilities for concerted action be established internationally through the instrumentality of governments, and the people will no more be decimated by those pandemic waves which have so often swept with cumulative impetuosity over the face of the earth. Utopian as the idea may at first sight appear of stamping out the great anti-sanitary evils which beget disease, still it would be taking a very limited view of the power of the human mind, and argue a strange obliquity of vision as to the lessons its triumphs in other fields are every day teaching us, to doubt our ultimate ability to do so."

He suggests that the meteorological and signal services be applied also to the study of epidemic influences, and that a daily interchange of observations be established.

"The important results that will follow when this labor of devotion to science shall be taken up and carried out from America to Europe, and the two continents made to exchange their daily records of disease and weather reciprocally, may be imagined, but cannot be conceived in their illimitable applications. Not only will storm-currents be indicated hours, if not days, in advance of their actual presence, but all the meteoric and other phenomena attendant upon the appearance of diseases will be noted and heralded, so that the progress of the latter may be combated in their small beginnings, before they gain a foothold in the land, and thus, while from the concomitant observations of an expanded horizon the origin and advance of epidemics will be made more apparent than they now are, so will their latent relationship to some great cosmic or telluric laws be probably discovered."

The magnitude of this scheme is commensurate with its importance, and when we have it in full operation we may confidently rely on a subjugation of some of the most fatal opponents of health.

THE MORTALITY OF CITIES.

Nothing so clearly indicates the importance of enlightened municipal government, especially in those departments which are concerned in the sanitary welfare of the inhabitants, than the effect upon the mortality of the population. The better governed a city, the lower its mortality, and *vice versa*.

The death-rate of various cities of the world during 1870 is as follows, the figures indicating the number of deaths per every thousand of population: Montreal, 31.5; Liverpool, 31.1; Vienna, 29.8; New York, 28.8; Manchester, 27.8; New Orleans, 27.58; Edinburgh, 26.3; Baltimore, 25.65; Chicago, 24.5; Boston, 24.55; Brooklyn, 24; London, 24; Philadelphia, 22.72; San Francisco, 21.57; St. Louis, 21.3; Cincinnati, 18.39, and Bombay, 18.2.

These figures, however, can only be taken approximately. Comparing the weekly returns during the past few months, New York, for instance, makes by no means so favorable a show. The weekly rate of mortality in New York is 68 deaths out of each 100,000 people, that of Paris is only 42, and that of London only 39. For the week ending May 18th, London, with a population of 3,251,800, had 1268 deaths; and Paris, for the week ending May 25th, had 812 deaths, out of a population of 1,980,000; while New York, for a corresponding period, with a population of 942,300 lost 646 of her inhabitants by death. Whence comes the higher rate of mortality in the latter city? The answer is found in the dirty condition of the streets, the culpable neglect of proper sanitary measures, the fast habits of life, the free use of the pistol, the knife and the bludgeon, the gulping down of victuals and drink at railway speed, without allowing any repose to the system after it, the incessant strain on the mind and the passions, and the undue wear and tear of the body in the daily whirl. These are the active agents in keeping down the population of New York. Each of them would furnish matter for a discourse, as it has done a thousand times, and will do, it is to be feared, a thousand times more.

The ignorance and negligence of the New York Board of Health is shown conspicuously in the fact that it refused to print the report of one of its most efficient sanitary inspectors, Dr. R. TAUSZKY, because that report showed that out of six hundred complaints he had made of violation of the health regulations, hardly any had been attended to by the Board. This conduct he justly stigmatizes as "shameful dereliction of duty."

Another fruitful source of ill health is the entire want of attention shown by architects and builders to the sanitary requirements of healthy homes. The proper ventilation of public buildings and private dwellings is too frequently sacrificed to external architectural beauty, or entirely overlooked. It is well known that whatever renders the air impure makes the blood impure, and whatever makes the blood impure tends to originate and foster consumption and other pulmonary diseases. All rooms, public or private, should have a current of air passing through them. But who does not feel exhausted after sitting for two or three hours in a crowded theatre, concert room, or public meeting, especially by gas-light, in our large cities, and simply because this sanitary necessity is not attended to?

It would be no exaggeration to say that a proportion of the mortality of cities is owing to the constant frequenting of crowded assemblies, balls, places of amusement and of public resort, where the air is oppressively hot, and almost entirely exhausted of its oxygen; and then, when the lungs are thus enfeebled, the stepping out into the open air, if it happens to be cold or chilly, as is the case ten months out of the twelve, produces a violent reaction, which is equally dangerous.

The whole of our domestic architecture should be reconsidered from the point of view of health, and not altogether studied from a mistaken notion of "comfort," and a foolish vanity of display.

Notes and Comments.

Correction.

Dr. Williams requests us to make the correction in his article, on page 524, second column, second line, of "chemical," instead of "criminal."

Epithelioma Cured by Creasote.

A noteworthy case is reported by Dr. Forné, in the *Montpellier Medical*, of last February, showing the excellent effect of topical applications of creasote in epithelioma. A sailor, twenty-four years of age, presented himself, with an ulcer on the cutaneous border of his upper lip, about four centimetres in diameter. The tissues were perceptibly indurated in its vicinity, there was a severe itching pain, and there was no trace of syphilis. After two days' observation the ulcer was increasing, and was pronounced epithelioma.

Treatment was commenced by dipping a brush in pure creasote, and having removed any that might drop, the whole surface of the ulcer was lightly but firmly touched with a brush, a certain degree of pressure being used, and the brush retained on the same point a few seconds, so as to insure a thorough application. A piece of lint moistened in a gummy solution of creasote was then laid upon the ulcer. The application caused but slight pain.

Three days subsequently it was found that the ulcer had not increased. The application was repeated in the same manner, and five times afterwards at about the same interval. Cicatrization then commenced and proceeded rapidly, being favored by a dressing of thin paper moistened with a solution of creasote. Entire recovery took place about six weeks after the treatment was commenced.

This method deserves to be tried in similar cases.

Spontaneous Cure of Fibroid Tumors of the Uterus.

Several cases of resorption of fibroid tumors of the uterine walls are collected and reported by Dr. Guéniot, in the *Bulletin de Thérapeutique*, March 30th, 1872. There can be no doubt of the correctness of the diagnosis in these cases, but the causes which determined the resorption of the abnormal deposits are unknown. He shows conclusively, however, that the chief modification which the tumors underwent was a change of their substance into fat—a fatty degeneration. This is strictly analogous to the physiological course which brings back the hypertrophied uterus to its normal size after child-birth. It also recalls the experiment of Claude Bernard, when he brought about resorption of the pancreas by means of fatty injections.

These considerations suggest two therapeutical plans by which these tumors can be made to disappear. The one is by injections into their tissues, a surgical method which promises well, but which has not yet been sufficiently investigated to pronounce upon it positively. The other is by the internal exhibition of those drugs known as steatogenics or fat producers, such as arsenic, phosphorus and lead. In view of the very unsatisfactory condition of the therapeutics of these tumors at present, these suggestions merit consideration.

On Centenarians.

Lately Sir Duncan Gibb, Bart., M. D., read a paper "On the Physical Condition of Centenarians." His remarks were founded upon an examination of six genuine examples, in whom he found the organs of circulation and respiration in a condition more approaching to the prime of life than old age. There was an absence of all those changes usually observed in persons reaching seventy years; and in nearly all the special senses were unimpaired, the intelligence perfect, thus showing at any rate the complete integrity of the nervous system. The author's views were opposed to those held regarding the extreme longevity of centenarians. In the discussion which followed, Mr. E. Walford pointed out that the statistics of tontine associations placed the fact of centenarianism, which the late Sir G. C. Lewis had disputed, beyond the possibility of doubt.

Treatment of Diabetes Insipidus.

M. Gueneau de Mussy, in a clinical lecture at the Hôtel-Dieu, recommends the administration of full doses of belladonna, and sulphurous baths, in the treatment of diabetus insipidus. He has twice found belladonna to accidentally produce anuria. Its use in incontinence of urine is well established. Systematically employed in diabetes insipidus, it has diminished the quantity of urine passed from ten pints to two pints *per diem*. The sulphurous baths bring the skin to the relief of the kidney.

Elimination of Nitrogen.

The Rev. Dr. HAUGHTON found no increase of urea during severe exercise. Dr. PARKES also finds that moderate exercise on a mixed diet has little influence on the exeretion of nitrogen or on the temperature. It causes t mporary quickening of the pulse; but this is succeeded by corresponding slowness, so that the mean pulse-rate during the day remains the same. The elimination of nitrogen is increased during the period of rest after severe exercise. The muscles can obtain the energy required for great exertion from fat and starch, though certain changes in their nitrogenous constituents also occur which give rise to increased elimination of nitrogen after the work is over.

Delicacy of Trommer's Test.

From some experiments Dr. MALZ has found that one part of sugar can be detected by this test in 5000 of water; but, in a quantity of urine equal to that of the water, twenty or thirty times the amount of sugar could not be detected. The cause of this is the kreatinin, and still more the urinary pigment, which redissolve the oxide precipitated by the sugar. Ammonia and ammoniacal salts do not hinder the reaction, but æt ylamin does. He recommends that the urine to be tested be first decolorized by digestion with animal charcoal, and then copper sulphate added to the mixture of urine and potash till a little remains undissolved; and the separation of oxide to be quickened by adding to the boiling fluid as much zinc oxide as will lie on the point of a knife.

"Ozonized Water."

The *Druggists' Circular* says about this new pr paration:—Ozonized water, which has been repeatedly branded by Hager as a swindle, has been examined by Prof. Boettger (Pn. Cent. Halle, 1871, 489), w..o found it to contain a little nitrous acid, and by Dr. Albert Kremer (*Ibid*, 1872, 2), who found a sample to contain a trace of binoxide of hydrogen, but no ozone.

Surgical Manners.

Dr. STROMEYER said, in his recent lecture: After having been in London, I happened to be in Paris at a time when Lisfranc was thundering against Dupuytren, whom he used to call "le barbare de la Seine," as a sample of good feeling amongst the profession there. It is one of the great advantages of traveling and of seeing eminent men of other countries that, by observing them in their activity, one may acquire a better notion of their character. Their writings excite greater interest, because we are inclined to give them greater credit. I always admired the simplicity of style in English authors in general, and of surgical writers in particular. Sterne ridicules the pompous style by mentioning the expression of his French barber about the solidity of a new wig: "You may immerse it into the ocean." An Englishman, says Sterne, would have preferred a pail of water. To avoid the barber's style I took precious good care never to say ocean when I meant a pail of water.

What Causes Cholera?

The latest theory is that of Dr. SCIPIO GIORDANO, of Turin. It is, he thinks, a vegetation analogous to the *mucedo*, and proceeds from the Ganges region, and it nourishes on the mucous membranes. With this idea, he considers that it should be treated by sulphur. Sulphur is little used in practice, except in treating itch. But Dr. GIORDANO thinks it should be used in small doses in many other diseases. He proposes it as a prophylactic in cholera, not as a cure. A little may be snuffed up the nostrils, combined with camphor and charcoal. But that it may sometimes be a purely nervous phenomenon seems shown by the following true story, one of a hundred such we could tell:—

When, some years ago, the cholera was prevalent at Newlyn, a fishing village near Penzance, intercourse was forbidden between the two places. One day a man entered the shop of a barber in Penzance, and was shaved. On leaving, some one who had recognized him asked the barber if he knew whom he had been shaving. He replied he did not. "Why, he's a man from Newlyn!" It was enough. The terrified barber was seized with cholera, and died within twenty-four hours.

The Arabian Physicians.

Medicine owes much to the old Arabian teachers. Their learning was introduced in all the schools of Europe. Avicena was born in Bochara, in 980, and his *canon medicinal* was used in the medical schools of Spain until the day when the Jews taught it in Montpelier. In the twelfth century

seventy libraries, and as many schools, opened their doors to the Spanish Arabian population. Albucazis and Averroes, the latter a native of Cordoba, flourished at that time. In the thirteenth century Ebyn Beitar, a native of Malaga, established an important botanical classification. There can be no doubt, then, that pharmacy, as it now exists, is indebted to the Arabs for the progress made in the science. The Arabs, as a certain sect, founded the profession of apothecary, separating it from that of medicine. It is sufficient to mention the discovery of the mineral acids, sulphuric, nitric, and hydrochloric, to show that they were the founders of modern chemistry. In anatomy and physiology, however, they knew no more than what is contained in the work of Galen.

Color Blindness.

At a recent meeting of the Boston Society of Natural History, the methods of testing patients for color blindness, and for loss of the power of color perception, were explained. An instrument, invented in Germany, for testing color blindness, was exhibited and explained. This instrument consists of a rotating apparatus, which moves a disk whose centre is a circle, one-half black and the other white; outside of this is a ring half red and half green, then another ring of violet and red, then the outside ring of violet and green. When rapidly rotated the centre appears to be colored gray, that is, black and white mixed. To a *green* blind person the middle ring will appear gray, that being the result to him of a mixture of violet and red. The outer ring will appear gray to the *red* blind patient, and the inner gray to the *violet* blind. By the use of this instrument it is evident a large number of patients may be simultaneously examined for one or more kinds of color blindness.

The External Use of Chloral.

A contributor to the REPORTER recently called attention to the external use of chloral. Recently Dr. MANCESCO ACUTTELLA has instituted, says the *Gazetta Medica Ital. Lomb.*, a series of experiments as to the use of this preparation in the cure of venereal ulcers. He says: While busying myself with similar experiments, LEBREICH published his observations on hydrate of chloral as actively hypnotic and anæsthetic. From that time I commenced to adopt that preparation as a local remedy, in concentrated solution, upon ulcers of such ancient date that neither the acid nitrate of mercury, nor the carbo-sulphuric paste, nor other efficient caustics had been able to effect a cure. The effects greatly exceeded all my expectations. After the first application the deep parts of the ulcer became detached, healthy and normal granulations sprang up, and the ulcer was transformed into a simple sore, with the usual tendency to cicatrization. In sixty-nine cases in which I applied chloral topically, the following results were obtained: seven ulcerated and obstinate abrasions healed in nine to sixteen days; forty-nine soft ulcers in from eight to fourteen days; three soft ulcers, complicated with diphtheria, in eighteen to twenty-nine days; five soft ulcers, complicated with phagedæna, in twenty-four to thirty-two days; five primitive infectious ulcers, in fifteen to twenty days. Among the cases of phagedenic ulcers it is necessary to note two which, for twelve or fifteen months, had resisted all local and general treatment, although the two women affected had the most fresh and florid constitutions. The solution employed was as follows: Chloral hydrate, five gram.; aqua destil., gram. twenty. This, applied with a pencil to the ulcerated surface, slightly cauterizes, without producing discomfort to the patient. After two or three applications, all unhealthy appearance at the bottom of the ulcer disappears, and the sore presents a bright redness which soon produces the most healthy granulations.

Treatment of Myopia.

After Donders the following is of bad influence upon myopic eyes: Pressure of the muscles upon the eyeball, when the axis of vision is very convergent, then increased intra-ocular pressure and congestion of the posterior parts of the eye. Blood-letting was recommended; but Dobrowalsky proved theoretically and practically that instillation of atropia (one part to one hundred and twenty of water, once or twice a day) has the best effect on myopia. Spasm of accommodation of the eyes preceded the myopia; this is curable by atropia. Every myopic young person under this treatment for eight or fourteen days, once or twice a year, can preserve good sight.

Correspondence.

Poisoning by Stramonium.

Eds. Med. and Surg. Reporter:

I was called to see Robert Garnham about half-past eight on Saturday evening, the 6th of April. I ascertained from the parents that the boy had been brought home about an hour previous; that he was totally unconscious; had vomited several times before reaching home, and that some larger boys had kicked him about the head and stomach. Could not learn that he had partaken of anything poisonous.

On examination, I found him lying in a comatose condition, breathing heavily and stertorously, blowing at each expiration, but normal as to frequency; a black frothy mucus issuing from the mouth; pupils dilated and fixed; no perceivable impression made upon them by a light held within two or three inches from the eyes; pulse quick and intermittent, ranging from 135 to 140 beats per minute; a cold, clammy sweat covered the entire surface of the body. Could discover no marks of violence about the head or body. Saw the case next morning about an hour before death, which took place at 9 A. M., Sunday. Learned the child became delirious during the night, desired to get out of bed, but never uttered a sound. The delirium was of short duration, however, and he soon relapsed into the condition as when first seen.

AUTOPSY MADE NINE HOURS AFTER DEATH.

External Appearance.—Rigor mortis; hypostatic congestion; a bloody, frothy mucus issuing out of the mouth. There were no marks of violence externally.

Internally.—Brain membranes v ry firmly adherent to the cranial bones; pia mater slightly congested; brain substance also slightly congested.

Thoracic Cavity.—Heart and lungs normal as to position; lungs healthy and crepitant; firm pleuritic adhesions over the entire right lung (old). Heart of normal size, valves intact and healthy.

Abdominal Cavity.—Liver and kidneys healthy; gall bladder somewhat distended; spleen healthy; œsophagus healthy, two dark seeds found in its upper portion; stomach and bowels normal as to position. Stomach distended with a dark-colored fluid containing a large number of dark seeds, slightly congested at its cardiac extremity; small intestines somewhat distended, and contained a light-colored, semi-consistent mucus; a few seeds were found in the small and large intestines; bladder about half-filled with urine.

Could discover no evidence of violence internally. F. Brunning, M. D.

Cincinnati, O., April 12th.

Case of Cerebro-Spinal Meningitis.

Eds. Med. and Surg. Reporter:—

The following case may have interest to your readers:—

Emma Hess, aged ten years, was taken suddenly ill on the 26th of April last. She had a chill in the morning, and I first saw her in the evening. The symptoms on my arrival were as follows: Skin cool and covered with purple spots all over, but most numerous on the feet, hands and chest; pulse soft, and eighty per minute; respiration natural; nausea and vomiting prominent; pains referred to the spine, and severe headache; bowels confined. Prescribed:—

℞.	Hydrargyri chl. m.,	gr.iij.
	Rhei.,	gr.x.
	Ipecac.,	gr.½. M.

To be given at once, and if bowels do not move in four hours, give sulphate of magnesia, which was found necessary. Also gave citrate of potassa, with spt. eth. nit.

27th. Patient had two spasms and two tonic contractions of the muscles of the neck, causing opisthotonos; vision double, and by spells entirely gone; pupils somewhat dilated; pains shifting, sometimes in the head, then in the arms, limbs and chest:—

℞.	Quin. sulph.,	gr.j½.
	Opii,	gr.½.
	Ipecac.,	gr.¼.

To be given every four hours, and 15 grs. bromide of potassium between each of these powders.

28th. Patient had six spasms; delirium quite active; partial deafness, and head strongly retracted; takes no nourishment. Treatment the same, with the addition of 1 gr. of calomel to powders, and bromide increased to 20 grs.

30th. Patient has had in all twenty-five spasms, and now a most craving appetite; calls constantly for something to eat, and eats ravenously anything that is brought.

One gr. opium, with ¼ of ipecac. every four

hours; bromide omitted, and the following liniment to the spine:

℞. Tr. aconit. fol.,
Chloroform,
Aquæ ammoniæ,
Tr. opii, aa f.℥ss.
Acid. carbolici, gr xx
Glycerin.,
Spt. camph., aa f.℥j. M.

May 3d. Hyperæsthesia of skin so great that the slightest touch causes pain, but in other respects there is improvement; no spasms within the last twenty-four hours, and craving appetite gone.

May 7th. Convalescent, and all the senses restored.

REMARKS.—I attribute the restoration of this patient principally to opium, and think it should have been given more freely in the outset. I omitted to say that this patient, like all others that I have seen suffering from the disease, was fretful and very impatient. She was, as WRAXALL would say, "irritable, and even irascible." This is a symptom very generally present in spotted fever, but I believe a favorable one.

Causation.—I believe this affection is always brought about by free *perspiration being checked suddenly.* A few years ago I gave the clinical history of twelve cases, all of which were traced to like causes.

The present case, EMMA HESS, played actively the day before she was taken ill, causing free perspiration, and then reposed upon the damp ground until cooled off.

This would arrest the action of the skin suddenly and repel the circulation from the surface to the internal organs, causing in these instances a congestion of the base of the brain and meninges of the spinal cord, and thus give us the terrible disease, cerebro-spinal meningitis. A careful inquiry into the etiology of this affection will, I believe, in all instances develop causes similar to the above.

J. K. HOLLOWAY, M. D.

Akron, O., June 22d, 1872.

NEWS AND MISCELLANY.

Medical Society of Sullivan County, N. Y.

The Sullivan County Medical Society, at its annual meeting held in the village of Monticello on the 12th of June, elected the following officers:—President, Dr. EDWARD F. QUINLAN; Vice President, Dr. William Brand; Treasurer, Dr. Isaac Purdy; Secretary, Dr. David H. Decker.

The Society passed the following resolution:—"That every regular physician practicing medicine in the county of Sullivan is expected to join the Society, and in default of fulfilling this obligation, after due notice, will forfeit all claims to professional recognition from its members."

Patents Issued.

List of medical patents issued from the United States Patent Office to United States Inventors, for the weeks ending June 11th and 18th, 1872, and each bearing those dates. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C.

11th.—Medical Compound for Treating Piles—John W. Ward, Lowell, Ohio.

Medical Compound and Disinfectant—Joseph Walton, Newark, Ohio.

Medical Compound for Treating Ringworm, etc.—Philip Roskopf—Brooklyn, E. D., New York.

18th.—Preparation for the Hair—Norman T. Ormsby, Chicago, Illinois.

Medical Compound—Milton H. Campbell, Syracuse, New York.

Medical Compound or Bitters—Elizabeth Phillips, Peoria, Illinois.

Medical Compound—Julius Cahn, Selma, Alabama.

Medical Education of Women.

The admission of women into the ranks of the medical profession in Germany appears to have commenced. A young woman recently presented herself before the Faculty of Medicine at Munich for examination for a license to practice as dentist. Being refused, she went to Erlangen. The question was here referred to the Government, who at once authorized the examination, on the ground that it was absurd to exclude a person desirous to submit herself to authorized professional tests of ability by reason of her sex. The young woman triumphed, and, the German journals add, is likely to find immediate imitators.

Burn Brae.

On Thursday last, by invitation of Dr. R. A. Given, a number of the medical men of Philadelphia visited and carefully inspected the institution known as *The Burn Brae*, a private hospital for mental affections, situated near the West Chester Railroad, about seven miles from our city.

The guests were handsomely entertained by Dr. Given, and afterwards assembled in the beautiful grove fronting the institution. Here, true to the American fashion, they organized a meeting, by calling on Dr. Wash. L. Atlee to act as Chairman, and Dr. Wm. B Atkinson as Secretary.

After speeches by Dr. J. L. Ludlow and others, a committee was appointed, consisting of Drs. T. G. Morton, J. J. Reese, and W. W. Keen, to prepare a resolution expressive of the sense of the meeting.

The Committee offered the following, which was unanimously adopted:—

Resolved, That we have derived much gratification from our inspection of Burn Brae, the beautiful and commodious establishment of our friend and professional brother, Dr. Given, and we believe it to be eminently adapted to the treatment of the class of patients for which it is intended; and we do cordially recommend the Institution as a most desirable residence for those suffering from mental affections.

Dr. Reese then offered the following, which was also adopted:—

Resolved, That we entertain a most grateful and appreciative sense of the very elegant entertainment by our genial host, Dr. Given, and we offer him our acknowledgments for the same.

After having spent a delightful afternoon, the party, about thirty in number, returned by the evening train, again to resume the cares and anxieties devolving upon the honest and conscientious physician.

Protection Against Accidental Poisoning.

The College of Physicians of Philadelphia adopted the subjoined preamble and resolution, and have communicated the same to the American Medical Association, lately in session in this city, by which body they have likewise been adopted. They have also been communicated to several pharmaceutical societies, with the request to consider them:—

"*Whereas*, Cases of accidental poisoning, and of the internal administration of medicines intended only for external use, are so frequent; and

"*Whereas*, Every possible safeguard should be employed to prevent such accidents; therefore

"*Resolved*, That it is recommended to all druggists to place all external remedies in bottles not only colored, so as to appeal to the eye, but also rough upon one side, so that by the sense of touch no mistake shall be possible, even in the dark; and that all bottles containing poisons should not only be labelled 'poison,' but also with another label indicating the most efficient and convenient antidote."

Cerebro-Spinal Meningitis in Palestine.

Dr. SANDRECZKY, Physician to the German Hospital in Jerusalem, writing in the *Berliner Klin. Wochenschr.* of May 13th, remarks that it is generally said that cerebro-spinal meningitis does not occur in the East, or, at least, that it has not been observed there. Within the last few weeks, however, he has for the first time met five cases in hospital and one in private practice. The patients were all young, apparently aged from 10 to 15; three were males, and three females; two died, and two were still under treatment. Regarding the prevailing atmospheric and other influences, Dr. Sandreczky says that the winter was very rainy; that the *sirocco* or *simoom* set in earlier than usual in the spring, and was followed by alternations of heat and east and south winds, with cold north and west winds. The condition of the population from which the cases came was miserable, on account of last year's drought and scanty harvest.

The Hotel Dieu, Paris.

The buildings of the new Hôtel Dieu, the construction and plan of which have been so much condemned, are still to be used for the purposes of a hospital, and they will not be converted into barracks, as was at one time contemplated, we believe, by the Imperial Government The completion of the buildings is at hand, and it is expected that the new hospital will be ready for the reception of patients before June of next year. The wards are lofty, and ample cubic space will be allowed. Wards of about one hundred and fifteen feet long and twenty feet broad are to contain sixteen beds, eight on each side.

The Consumption of Alcohol.

The proof spirits distilled in Great Britain and Ireland during 1871 amounted to 30,855,035 gallons, of which 13,813,062 gallons were distilled in Scotland, 9,302,253 in Ireland, and 7,739,720 gallons in England. The proof spirits consumed in Great Britain and Ireland in 1872 amounted to 24,163,644 gallons, of which 12,874,372 gallons were consumed in England, 5,671,477 gallons in Scotland, and 5,617,644 gallons in Ireland. The duty derived from this source amounted to $60,409,110.

A medical college for women is being erected in India by a Mohammedan Nawab.

MARRIAGES.

BOOTH—MACLAY.—By Rev. J. O. Hough, May 16th, at the residence of Dr C. B. Maclay, Mr. C. L. Booth and Miss Siddie Maclay, all of Delevan, Ill.

CLEGG—EDGAR.—At Trinity Church, New York, June 27, by Rev. W. W. Holley, Charles A. Clegg, of Dayton, Ohio, and Mary Seguine, daughter of Dr. D. A. Edgar, of Staten Island.

CORTELYOU—TOWNSEND.—June 20, at St. George's Church, Newburg, N. Y., by Rev. Dr. Brown, Dr. L. V. Cortelyou and Carrie, youngest daughter of the late William H. Townsend.

DURYEE—HALL.—At Newark, N. J., June 27, by Rev. E. P. Terhune, D. D., Miss Amy J. Hall, daughter of A. A. Hall, Esq., of Newark, N. J., and Dr. John L. Duryee, of Champlain, N. Y.

JAMES—THOMPSON.—In the Second Presbyterian Church, Rahway, N. J., June 19th, by the Rev. J. A. Liggitt, assisted by the Rev. David M. James, of Bath, Pa., Hiram H. James, M. D., and Fannie B., daughter of the late Jonathan Thompson, of Rahway.

DEATHS.

DOWDELL.—At the residence of his mother, near Independence, Kenton County, Ky., June 15th, 1872, Dr. J. L. Dowdell, aged 25 years and 3 months.

GILLESPIE.—On the morning of June 29, John E. Gillespie, Assistant Surgeon U. S. N.

JACKSON.—At Rockaway, N. J., June 29, Fannie McCarty, wife of Dr. John W. Jackson.

RICHARDS.—At Washington, Conn., on June 23, 1872, Dr. J. Huntington Richards.

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Communications.

SPECTRUM ANALYSIS.

By Charles K. Mills, M. D.

Read before the Northern Medical Association of Philadelphia, April 25, 1872.

The medical profession demands broad culture of its true apostles. Is not every contemplative physician at times forcibly struck with the thought of the wide scope naturally embraced by his studies? In order to take front rank in his calling, or even to keep level with his age, he must "know what's what" in almost a score of sciences which run parallel with or contribute to the practice of medicine. Spectral analysis is the last lode which he is asked to work, and it is one which promises a rich reward to the patient delver. The time is close at hand when a fair understanding of this subject will be deemed as essential to a complete medical education as a knowledge of microscopy and chemical analysis are now considered.

The light-sifting triangular prism of glass, with which Grimaldi first dissected a sunbeam, in the hands of modern science, such as Kirchoff, Bunsen, Huggins, Sorby, Stokes, and Hoppe-Seyler, is solving many of nature's most doubtful and difficult problems. To the spectroscope, the ores of earth and the stars of heaven have revealed their best defended secrets. Through it have originated new branches of physical and chemical science. To astronomy it has given the strongest impetus received since the discovery of the telescope. It is making solar, stellar and planetary chemistry, almost as familiar as the strictly terrestrial sciences. Even into the realms of biology the light from this instrument has pierced, and is now diffusing, a fact which renders spectrum analysis of deep interest to physicians and surgeons—students of the processes of life—and those who, according to Byron, secundum artem, mend or end mankind.

In the present essay, my main purpose is to afford a comprehensive idea of the scope and bearing of spectroscopy in medicine, in physiology, pathology, and toxicology. As, however, I am well aware that this whole topic is, to many medical men—although they may be highly cultured in other respects—as yet an untrodden path, I will prelude my subject proper with a brief glance at the general progress of this new and important light-born science.

To Newton, the world is indebted for its first accurate information in regard to the analysis of sunlight. When an isolated pencil of light is allowed to fall on a transparent triangular prism arranged horizontally on its path, the light is bent from its course, both on entering and leaving the prism, and in addition, at the latter instant it is broken up into the tints of the rainbow, which can be received on a screen as a vertical band of colors, called the solar spectrum.

It is customary, following the original investigator, to distinguish seven colors in this spectrum, these being from above downward, violet, indigo, blue, green, yellow, orange, and red. Philosophers, however, have differed in regard to the number of primary colors; some, as Brewster and Young, contending that there are but three;

others, as Mellorn, Bernard and Helmholtz, holding to Newton's doctrine of seven; while Sir John Herschel has added two to the original seven, making nine. Beyond the red Herschel found a crimson tint, which can only be seen by looking through cobalt-blue glass; and beyond the violet a lavender-grey, which becomes visible when the spectrum is received on paper turned yellow by tumeric. I have not the time to dwell upon many interesting points in regard to this brilliant rainbow streak, to speak of its magical calorific and actinic, as well as luminous powers, and of the almost incredibly rapid ethereal vibrations of which it is simply the visible expression.

The "waste of color" with which our earth is drenched is all owing to this spectral band. To this lovely sun-painted image every line in nature is due. Beautiful, however, as are the hues of the spectrum, and those to which it gives birth, we, as students of the new method of analysis, are more interested in the defects of color than in the colors themselves. Let us see. The colors of the spectrum seemed without breach, until Wollaston, in 1802, admitting the light through a fine vertical slit, discovered that there were gaps in the apparently uniform band; he made out two dark lines crossing its length. He did not, however, follow up his discovery, which might have led to grand results in his potential hands. The investigation was taken up by a patient and persevering German named Frauenhofer. Wollaston examined the spectrum by simply placing his eye in the path of the decomposed light; Frauenhofer used a telescope, and by 1814 had made out 576 lines crossing the spectrum. These dark lines, bands, or spaces, after the investigator, have been called *Frauenhofer's Lines*. The most distinct sets of lines are especially known by this name. Some of the dark spaces, once thought to be single bands, are now known to consist of a multitude of fine lines. Anestrom enumerates more than ten thousand.

So much for the prismatic refraction and dispersion of a pencil of solar light, and the solutions of continuity thereby brought to view; but direct sunlight is not the only source of spectra. Artificial sources of light, such as incandescent solids and liquids, glowing vapors, and the electric spark, also produce spectra. The spectrum derived from sunlight directly, from reflected solar light, and from star light, is called an interrupted spectrum, because of the dark transverse gaps which it exhibits. An incandescent solid or liquid gives a continuous spectrum, that is, a colored band, unbroken by dark or by brilliant lines. A glowing vapor produces a spectrum of bright lines, separated by wide dark intervals. Each vapor has its own set of bright lines. The most marked color in the artificial light is the best defined in its spectrum. The salts of sodium, for instance, it is well known, cause a yellow flame, hence a yellow tint will predominate in the spectrum of sodium. The electric spark affords a bright line spectrum, compounded of the spectra belonging to those vapors between which and of those through which the discharge takes place.

The extraordinary delicacy of the spectrum analytic method is truly astonishing, in illustration of which fact I will condense some statements from Roscoe. The $\frac{1}{180,000,000}$ part of a grain of sodium can easily be detected. This substance is always present in the air, and all bodies exposed to the air, when heated, show its line. The $\frac{1}{3,000,000}$ part of a grain of lithium, and the $\frac{1}{1,000,000}$ of strontium and calcium, can also be readily discovered. These, too, are widely distributed elements. Lithium was formerly only known to exist in four minerals; it has now been determined to exist in rocks, in sea and river water, in the ashes of most plants, in milk, human blood, and muscular tissue. Cæsium and rubidium are new alkaline metals discovered by Bunsen in the mineral waters of Baden and Dückheim. Thallium is a metal discovered by Crookes in 1861, and distinguished by the splendid green line which its spectrum exhibits. Iridium was discovered by Professors Reich and Richter in zinc blende, and is distinguished by the two indigo bands in its spectrum.

My limited time will not permit me to discuss, as I would desire, the grand achievements of the spectroscope in astronomy and cosmical physics. I will allude to but one of these; the researches with this instrument have entirely exploded the doctrine of Wilson, Bede, and Sir William Herschel, that the sun is a dark nucleus, surrounded by three atmospheric strata or envelopes. It has rendered the theory that the sun is inhabited by beings like ourselves altogether untenable. This orb is now believed to consist of an incandescent liquid or solid

nucleus, enveloped in an atmosphere of flame. Note here the rationale of the causation of Frauenhofer's lines. An incandescent liquid or solid gives a continuous spectrum; a glowing vapor affords a spectrum of bright lines, each vapor having its own set of bright lines. A gas or vapor, according to a grand law established by Kirchoff, absorbs those bright rays which it can itself emit. The vaporous envelope of the sun cuts off those rays from the central orb to which this envelope can itself give rise, and Frauenhofer's lines mark the position of these halted rays.

For the benefit of those who have no knowledge of the construction of the instrument I will here describe a common form of the spectroscope. In a box or chamber, supported on a pedestal or stand, a prism or prisms are mounted, with their refracting edges horizontal. To the front of this chamber is secured a tube, called the collimating tube, which has a convex lens or lenses at the end nearest the chamber, and a slit at the other extremity, in the principal focus of the lens or lenses. This slit can be adjusted in width by means of a fine screw. The back of the box or chamber has attached to it a telescope, with an adjustable eye-piece. The collimating tube and the telescope generally have object glasses of from ten to twenty inches focus. Sometimes there is a third tube connected with the apartment containing the prism, which can be moved by a screw, and which holds at the end nearest the prism a lens, and at the other a scale divided into millimetres. The tube is so placed that when a light passes through the scale the image of the scale is reflected from the prism into the telescope.

The method of observing spectra, of making an analysis by means of the spectroscope, in other words, is not difficult to understand. Solids and liquids must be brought to a state of incandescence; their spectra are continuous, and so much alike that they cannot often be distinguished. Spectrum analysis is more particularly concerned with the investigation of gases, which give discontinuous or interrupted spectra perfectly characteristic. Substances should, therefore, whenever practicable, be reduced to the vaporous or gaseous condition; and whatever they may be, they are so placed that the light from them will pass through the slide of the collimating tube. The Bunsen burner is sufficient to volatilize many of the metals, such, for instance, as potassium, sodium, lithium, stradium, calcium, barium, cæsium, rubidium, copper, manganese, thallium, and indium. The electric induction coil is often used to volatilize more refractory substances. Gases can be well investigated by passing an electric induction spark through their extremely attenuated atmosphere, as found in the case of Geissler's tubes, or much better in Plücker's capillary tubes. By Plücker's method, capillary tubes, with a ball at each extremity, are filled with the gas to be examined, and then exhausted to an extreme degree of attenuation. Electrodes of platinum or aluminum are inserted into the bulbs, and these are connected with an induction coil. The gases or vapors can be rendered intensely luminous in this way, and emit a brilliant line of light, whose spectra can be determined, even without a complete spectroscope, by simply viewing the light through a prism held before the eye. Liquids in glass tubes, or in glass vessels with plane-parallel sides, are placed before the slit, and the light passed through them. They give what are known as absorption bands in various parts of the spectra.

These absorption spectra should be understood. Certain substances have the property of absorbing light; that is, they can weaken or destroy some of the ethereal vibrations which constitute light. The phenomena of absorption are strikingly seen when light is sent through colored bodies. Looking through red glass, every object appears red, because the glass absorbs every other color but the red. Most kinds of glass absorb rays of certain colors, and allow others to pass through in very different proportions. Colored liquids have a more decided and marked absorption power than colored glass. The colors of liquids, as seen by white light, are mixed. Their absorption varies exceedingly, according to the refrangibility of the light which falls upon them, and the degree of concentration possessed by the solution. When a colored liquid, as blood, is placed in front of the slit, and a bright light passed through it, a brilliant spectrum appears, crossed by dark bands produced by the absorbing power of the liquid.

As I advance in the consideration of my topic, it will be seen that the spectroscope is one of the most powerful auxiliaries to a

scientific understanding of our grand medical art that modern science has produced. In physiology and pathology, and even in toxicology and medical jurisprudence, much has already been done with it, but much remains to be accomplished. In botany and zoology there are many opportunities for spectroscopic investigations; and so I might go on at some length, were it profitable, enumerating sciences collateral to medicine, in which spectral analysis is destined eventually to become a prominent feature. In passing, I might here remark that the spectroscope has even been introduced into the affairs of every-day commerce; Sorby, for example, having used this instrument to examine dyes, wine, beer, mustard, cheese, butter, and similar articles.

In physiological, toxicological, and similar researches, an instrument, known as the *Spectrum-Microscope* or *Microspectroscope*, is generally employed. As its name implies, it consists of a combination of a microscope with a spectroscope. The two are so united as to enable the observer to examine the spectrum of the light passing through any object in the field of vision. Sorby illuminated the object to be examined by placing it in the spectrum formed on the stage of the instrument by a prism and lens placed beneath; but Huggins, in May, 1865, first pointed out the method of observing the spectra of the light from microscopic objects by means of a slit and a prism placed *above* the object-glass of the microscope. In the *direct vision* instrument, now most commonly used, the spectroscopic arrangement takes the place of the ordinary eye-piece of the microscope. * * In the best instruments there is an apparatus by which the substance under inspection can be compared with the spectra of known substances.

Crookes has devised a form of the spectrum-microscope, in which, beneath the principal stage of the microscope is a substage carrying a half-inch object-glass, which throws an image of a slit into the field of view. The slit is carried on a brass slide, by pushing which, it can be replaced by a circular aperture admitting a wide beam of light; or a square aperture, to be used when searching for *dichroism*—a property which some crystals possess of appearing of two different colors when light passes through them in different directions. Immediately above the object-glass is a slide carrying the direct vision prisms, which, by a movement of the finger, can be thrown in or out of the field. All these parts may be permanently attached to the microscope. When, however, it is desirous to examine the spectrum of any object which is in the field, the image of the slit is brought in with one touch of the finger, and the prisms are pushed in with another, when the spectrum appears and may be brought to a caucle focus by the ordinary rack-work adjustment.

It will be necessary to speak in some detail of spectroscopic investigations of the blood, these lying at the root of the use of spectrum analysis in physiology and pathology.

Sorby, Stokes, Hoppe-Seyler, Valenten, Gladstone and a few others have been prominent in the study of blood by this mode of analysis. Stokes, in 1864, in the *Proceedings of the Royal Society*, published the first paper on the relations of light to the coloring matter of the blood. In an article in Volume II of the *Quarterly Journal of Science* (British), for 1865, *On the Application of Spectrum Analysis to Microscopic Investigations, and Especially to the Detection of Blood-stains*, Sorby claims to be the first to apply spectrum analysis to microscopic investigations, and describes a form of spectrum-microscope in which the object to be examined was examined by placing it in a spectrum formed on the stage of the instrument by a prism and lens placed beneath. This, as I have already stated, has been supplanted by an arrangement in which the prism is placed *above* the object-glass. Among other investigations, Sorby examined the spectra of crystalline salts and their solutions by means of the spectrum-microscope.

(To be Continued.)

REPORT OF THREE HUNDRED AND THIRTY-SIX OBSTETRIC CASES OCCURRING IN PRIVATE PRACTICE.

By Francis H. Milligan, M. D.,

Of Wabasha, Minnesota.

The above cases are those attended by me since I began the practice of medicine, twenty-one years ago last March. In point of number I am aware that they are equalled by many. When, however, it is remembered that with the exception of the first two years of my professional career I have been located in a new country, with a small population, extending over a circle of coun-

try for miles around my place of residence, you can readily see that the notes of the above cases will be of interest to the profession at large.

The great number and variety of difficult labors, above the same amount occurring in a more densely populated district, in my opinion can be accounted for by the great distance which a number of these cases were from the medical attendant at the commencement of the labor.

The following table will show the presentation, sex of child, and other data which will be of interest:—

	No.	Total.
Male Children	175	
Female Children	161	336
Presentation of Head	300	
Presentation of Breech	20	
Presentation of Shoulder	10	
Presentation of Face	6	336
Prolapsed Cord—		
In Breech Presentation	16	
In Vertex Presentation	3	
In Shoulder Presentation	3	22
Miscarried—		
From Accident	8	
From unknown causes	12	20
Abortions caused—		
By Drugs	8	
By Accident	6	
By Instruments	6	20
Puerperal Convulsions—		
Before and during Labor	8	
After Labor	6	14
Puerperal Fever	12	12
Placenta Prævia	4	4
Craniotomy	6	6
Application of Forceps	25	25
Post Partum Hemorrhage	6	6
Retained Placenta—		
In Abortions	6	
In Miscarriage	5	
In Full Term Labors	4	15
Multiple Births—		
Dead Born	4	
Living	4	8
Double Placenta in	4	
Single Placenta in	4	8
Spina Bifida occurred in—		
Complicated with Intra Uterine Hydrocephalus	1	
With Club Feet	5	
No Complication	1	7
Version by the Feet—		
For Placenta Prævia	3	
For Arm Presentation	7	
For Exhaustion of the mother, head of the child retarded in superior strait	3	
From other causes	5	18
Natural Labors	272	
Application of Forceps	25	
Version by the Feet	18	
Manual Extraction for Adherent Placenta	12	
Craniotomy	6	
Evisceration	3	336

	No.	Total.
Number of Deaths of Mothers—		
From Puerperal Fever	4	
From Puerperal Convulsions	4	
From Uterine Hemorrhage	2	
From Placenta Prævia	1	
From Debility and Septicæmia	1	
From Abortions	4	
From Rupture of the Womb	1	17
Number of Deaths of Children—		
Still-born from Abortion	20	
Miscarriages	20	
Other Causes	10	59
Number of Cases in which Mother and Child died—		
Puerperal Convulsions	2	
Placenta Prævia	1	
Debility and Prostration	1	4
Number of Mothers died from all causes		21
Number of Children died from all causes		63

Most all of the above cases were women of good general health, pioneers from the older States, who had come to the West for their new homes; all young and active, inured to the hardships of a life in a new country; women of nerve and determination. As they pass away to give place to their daughters, they cannot but be admired for their moral and social worth. And yet you will see that the great amount of difficult and instrumental cases is apparent. In a great majority of the breech presentations, also of the shoulder, the want of knowledge of the attending midwife did much to complicate the case. For example, when the shoulder presented, the midwife or neighboring granny, wishing to deliver before the arrival of the medical attendant, often pulls down the shoulder and arm, sometimes using so much force as to pull off the arm.

Again, in breech presentations, I have known the midwife to try to keep back the descent of the breech, frightened to death, thinking it was the bladder. Numerous examples could I relate of cases where the midwife or the attendant did everything that could be done, under any circumstance, to retard and complicate the labor. A case in point. After a miscarriage, a retained placenta, lying in the vagina, was, by a German male pretender to the obstetric science, taken for a retroverted uterus.

Prolapsed cord, as the table shows, occurred sixteen times. Those which occurred in breech presentation, the feet were brought down, and delivery effected. In the head presentations, I lost two of the children; I turned and delivered in one case, and saved

the child. All the shoulder presentations were fatal to the child, with this complication. In one instance in a shoulder presentation, the cord was brought down by the meddling of the midwife. Miscarriages from accident were always preceded by alarming hemorrhages and prostration. One case died of h morrhage, and another of puerperal fever.

Abortions, as the table shows, are not as numerous as they are in more densely populated districts. Four deaths have been reported, three in married, and one in single women. Eight were caused by the administration of drugs with a criminal intent, in which the wife, husband, and others, were equally to blame. Of the accidental cases, so reported, one was not altogether the result of an accident, and came near costing the woman her life. The instrumental cases occurred generally in married females, one of which proved fatal.

To proceed. The alarming increase of abortions will not be denied. All over the land, husbands and wives will openly apply to physicians for relief, and not a blush of shame is shown on their faces. This child murder is a growing evil: a disgrace to our land, and a dishonor to all concerned. I warn our younger members of the profession to beware, for to them will appl cations be the most frequent. I am not much of a moralist, but in all these cases where the husband and wife have been party to the murder of their own offspring, ill luck and bad feeling has been their lot in life, and in no single instance I can now call to mind have the parties to these child murders been bettered by their criminal act.

Puerperal convulsions before labor have occurred in eight cases. In all of these but two, instrumental delivery was effected, but the child died with the mother. In four of the eight cases above stated, the children were born alive, and are now, so far as I know, yet living. One of the above cases occurred at the sixth month; the mother taken in a convulsion soon after returning from church, the convulsions returning every fifteen minutes for four hours, when they occurred every hour and a half for forty-eight hours. The child was then born putrid, and showed indications of having been dead for some time. General bleeding and chloroform was the treatment in this as in other cases of puerperal convulsions. On the slightest motion the chloroform was applied or administered with the best effect. After delivery, all the children lived, and also all the mothers but one, and another which died of puerperal fever. My habit in puerperal convulsions has been to deliver as quick as possible, to bleed until the effect is produced on the pulse, to administer chloroform when the patient manifested the slightest spasm. In one of the above cases, twins were delivered, the first by forceps, the second by eversion by the feet. Both children lived, but the mother died twelve hours after delivery in a convulsion. The great trouble in this case was undoubtedly uræmic poison. No urine was voided, in fact there was none secreted. The first pain was accompanied with a convulsion, and they occurred at intervals of from five to ten minutes until the woman died.

I have seen no epidemic of puerperal fever; all my cases have been sporadic. One of the cases of puerperal fever resulted in mania, and died on the fourteenth day.

In placenta prævia, which has occurred in four cases, in three of which the mother and children lived, forced delivery was effected by version of the feet as soon as the os was sufficiently dilated to admit of the operation. In one case I lost both mother and child.

Craniotomy was performed in six cases, all for impacted head in the superior strait of the pelvis. Sufficient time was allowed and efforts made to turn before the operation was resorted to. In every instance the mother recovered.

Application of the forceps, as the table shows, has been resorted to quite frequently in a number of cases. Still, in no single instance, can I honestly ascribe any bad results to mother or child by the operation. It is true I have extracted dead children, but the application of the forceps could not have been the cause of the death of the child, for the head had been in the cavity for hours, and all natural efforts had failed when the instruments were applied.

I delivered one woman with forceps, when the head of the child was retained in the pelvic cavity for twenty-six hours, face presentation. The woman had vesico-vaginal fistula. I do not think that the forceps had anything to do with producing the injury. I have used the long forceps for the reason that they could be adjusted, when the short forceps could not be used.

Multiple births, as shown by the table, were eight. Dead born four. The head pre-

sented in all the first children born, the breech in the second.

In uterine hemorrhage after labor, the indication of treatment has been with me to create uterine contraction externally by cold and manipulation, internally by removing all clots from the cavity of the womb. I have placed very little faith in ergot, and have never had a case where I have seen it do any good. Immediate measures are those which we should rely on; the great prostration of the mother, with the irritability of the stomach, prevents the action of the ergot. Dr. Lincoln, of this city, resorted to intra-uterine injections of persulphate of iron in a very severe case of uterine hemorrhage, in 1861. The case was one which I had attended. Being appointed Medical Officer in the army, the Doctor took charge of the case, and used the form of treatment above mentioned, the woman making a rapid recovery. This, as far as I know, was the first application of the kind made in the State, but now has grown into general use.

The operation of evisceration for transverse presentations, where the shoulder has descended, the arm protruded, and in one instance actually torn from the body, is one of the most difficult that I have performed in obstetric practice. I have been compelled to operate alone, miles from medical assistance, and with no one to render me aid but the neighboring women. All the women upon whom I operated were worn out by nervous prostration and fear; immediate action to save life was necessary. At best, it is not an enviable position to be placed in, but when you are alone, far from the assistance of a medical friend, you will find that the operation is one of the greatest moment. Professor Paget* has devised an instrument to decapitate the head of the child in these cross positions, of which Dr. Kidd, in his Address to the Obstetrical Society of Dublin, on Modern Improvements in the conduct of Labor, speaks very highly.

The case of rupture of the womb was produced by the administration of ergot.†

Spina bifida occurred in seven children, one complicated with intra-uterine hydrocephalus.

Club feet was also a complication in all but one of the remaining children which were afflicted with this deformity.

*Medical and Surgical Reporter, page 392, May 4th, 1872.

† Richmond Medical Journal, Vol. 1, page 199.

I had one case of imperforate anus, the anus opening into the vagina, child otherwise healthy.*

Anæsthetics.

In all of my operations I have used either ether or chloroform. My preference is in favor of the latter article, for the reason that it produces less nausea and vomiting. The excited state which ether often produces on the patient creates too much excitement, which the bystanders too often attribute to the operation which the physician is performing. However much chloroform may be condemned in general surgery, in my opinion, in the operations peculiar to the lying-in room it has no superior as an anæsthetic. Few physicians would at the present day attempt to perform any operation of importance without its use. I would as soon think of leaving my instruments as I would my chloroform, when called to a distance in a labor case. I do not know that I can now call to remembrance a single case in which I have done wrong by having instruments and chloroform. On the contrary, I could state when the absence of instruments and chloroform resulted in the death of the mother and child.

Version by the feet has been performed by me eighteen times, and I must say it has not resulted in any bad effects to the mother or child. In two cases I failed to deliver the head. One of the children was alive, and probably died from my imprudence in resorting to the operation before I could get my instruments. The instruments were sent for only a distance of three squares, but the child was delivered dead before their arrival.

Twice in my experience, I have failed to deliver the head after the body was born. My usual habit is not to resort to turning, unless I have my instruments, so as to guard against the detention of the head at the inferior strait.

Version by the head, so often spoken of and performed by Doctor Wright, of Cincinnati, has not been very successful in my hands, especially when the water has drained off. When version is necessary, the feet of the child give us the best hope of success, particularly if we wish to deliver quickly. Cephalic version will, I apprehend, scarcely come into general use. Nevertheless, to Dr.

*Northwestern Medical and Surgical Journal, Vol. 1, No. 2, page 49.

Wright the profession are greatly indebted for this operation in obstetric practice.

REFLECTIONS.

When I started out in life as a practitioner of medicine, I formed a plan to register the exact position of the child's head, the duration of the labor and other data in all my obstetrical cases. In the hurry of a large and extensive country practice, which in any country is laborious, more particularly so in a new country, I have found that it would be impossible to be as minute as I should have wished.

In twenty-one years, a long time, many improvements in our profession have taken place; the labors in the East, of Sims and Emmett, have been crowned with success. Pope and Brainerd, of the West, have passed away, to leave names behind them which few in our day will equal. Dunglison, Jackson, Dickson and Gerhard, household names in our profession, are gone. Gurney Smith, Aitken Meigs, Da Costa, and Tyson are their worthy successors. Our late war brought out the merits of a great deal of our American talent, North and South, and if no other good resulted from the loss of human life, American surgery stands to-day unequalled in all its branches by any nation on the face of the globe. Our sons need no longer seek foreign countries to perfect their medical studies, for they would leave behind them in their own native land better medical schools than they could find in any other country under the sun. Our hospitals are as extensive as any in Europe, and our clinical teachers will compare favorably, in all the branches of medicine, with any in Europe.

HOSPITAL REPORTS.

PHILADELPHIA ORTHOPÆDIC HOSPITAL, AND INFIRMARY FOR NERVOUS DISEASES.

Service of Drs. MORTON and GOODMAN.

[REPORTED BY DAVID DAVIDSON, M. D., RESIDENT SURGEON.]

Case I.—Long Standing Strumous Disease of the Knee.

Robert E. P., aged six years, was brought to Dr. Morton's clinics during the months of March and April; the mother died of phthisis; father healthy; when six months old the child had strumous ophthalmia, and when a year old he suffered from suppurative synovitis in the right knee-joint; abscesses opened spontaneously, discharging osseous fragments. After a long and painful confinement, the leg gradually became contracted, and distorted, and atrophied, fistula remaining unhealed. April 22 the little patient was admitted into the hospital with a view to straighten the limb after resection. On examination the joint was only partially anchylosed; in the popliteal space most of the integument was lost through ulcerative action, and dense cicatricial tissue was found pierced by numerous fistulous tracts through each; a probe readily detected necrotised bone.

Lacto-phosphate of lime, and cod-liver oil, with brandy punch and beef tea were prescribed.

April 27.—Resection was attempted after etherization, but the parts were found so disorganized, the necrotised condition involving the tibia and femur so extensively, and the loss of integument in the popliteal space so great, that amputation was performed; a long anterior skin flap was dissected up, the muscles cut circularly, and no posterior flap was required; three vessels only required ligature, and silver sutures brought the wound together; charpie and a bandage completed the dressing, which was not removed for four days, there being little or no discharge, the parts uniting almost entirely by first intention; ligatures came away on the eighth day.

May 31.—Child up and dressed; rapidly improving in health and strength.

June 12.—Discharged; the child was detained long after complete union in the stump.

Case II.—Slight Varus, Division of Tendo-Achillis and Plantar Fascia.—Cure.

Susan C. M., æt. 18; parents healthy; no deformities of any kind ever existed in the family; the child's mother being seriously affected prior to her confinement, a child having died suddenly in her arms; from

No. 1.

this she did not fully recover until after her confinement. Talipe Varus was noticed in the child at birth. At the age of six months the Tendo-Achillis was divided, and an apparatus worn for six years; the same tendon was again divided on account of recurring inversion, after an interval of several years, by Dr. Morton. October 18th, 1870.

May 27th, 1872.—Patient was brought to Dr. Morton's clinic, when the plantar fascia was found exceedingly tense, and slight disposition to varus. The foot otherwise was quite well and strong, with good flexion and extension, and prelateral motion. Free division of the contracted fascia was performed, without any anæsthetic; no blood followed the section; adhesive plaster applied and foot and leg bandaged as high as the knee; ordinary night shoe (see Fig. 1) was applied, and worn for three days, when the patient was allowed to walk about with the ordinary braces adapted for weak ankles, the usual club foot apparatus being long since dispensed with.

June 1st.—Patient discharged, perfectly cured.

Case III.—Double Equino-Varus.

Louis Miller, æt. 6; no hereditary deformity of any kind in his family. The mother noticed, some time prior to her confinement, a peddler whose feet were very much deformed pass her window daily. The man's feet made a great impression upon the mother; her only thought, at the time, was that she would have a child deformed in a similar manner. The child was born with double club-foot of the Equino-Varus variety. When three months old, Dr. Gross, of Jefferson College, divided the Tendo-Achillis and plantar fascia. Braces were then applied, and worn for six months; parents not noticing any improvement, laid aside the braces.

No. 2.

May 4th, 1872.—Admitted to Hospital. Patient walked on the dorsum of the foot; feet were very much disfigured. Under the influence of ether, as an anæsthetic, Dr. Goodman divided freely the Tendo-Achillis in two places, and also the plantar fascia of the right foot, the tendons of the tibialis anticus and Achillis of the left. The feet were well stretched, and the tarsus brought into their normal position. Kolbe's night-shoe for club-feet (see Fig. 1) was then adjusted; patient put to bed. On third day the shoes were removed, and feet were well stretched. Kolbe's walking-shoes (see Fig. 2) were then put on. The feet were stretched daily.

June 7th.—Patient discharged, perfectly cured.

Medical Societies.

Minutes of the Rock River (Wisconsin) Medical Society.

According to resolution, the Society held its third meeting at Theresa, May 8th, 1872. The following members were present: Drs. Marston, Lœhr, Lueck, Rodgers and Senn. The secretary being absent, the president appointed D. N. Senn as secretary pro tem.

Dr. Charles Hævernick, of Iron Ridge Station, member of the Fond du Lac County Medical Society, applied for admission, and after a favorable report of the Censors, he was unanimously admitted.

After the appointment of the usual committees, Dr. N. Senn read an essay on

The Pathology and Treatment of Hydrocele.

The causes, symptoms and diagnosis of hydrocele were fully described. In treatment the author would rely entirely on the seton. He applies the seton in the following manner: A trocar is introduced at the usual point of tapping: after the contents of the hydrocele have escaped, the stilette is again introduced in the canula, and both are pushed through the anterior wall of the tumor from within outward, so that the instrument emerges 1½ to 2½ inches from the point of entrance. The stilette is now withdrawn from the canula, and an eyed probe drawn through it, armed with a few strands of silk. The canula is now withdrawn, the silk threads are loosely tied, and the resulting inflammation carefully watched.

He prefers the seton for the following reasons: First, It never fails in curing the disease; second, it is easily applied; and third, it is safe if care is taken to remove it as soon as irritation enough is set up.

In discussing this subject Dr. Rodgers stated that he had seen about a dozen cases of hydrocele; all of them were cured by injecting tinct. iodini. He, therefore, would first try injections, and after he failed with them would resort to the seton.

Dr. Lueck said that in one case, treated by the seton, he had seen severe symptoms, and afterwards a tedious recovery. And hence he would first use injections, and next the seton, if necessary.

Dr. Lœhr reported two cases of hydrocele cured by the application of the tincture of iodine externally, and strapping. Other

cases he saw recover after injections of the same substance.

Dr. Marston had seen a dozen cases; all of them were treated and cured by a diluted injection of tinct. iodini. He would not interfere with the hydrocele of young children, as that generally gets well by itself.

Progressive Muscular Atrophy.

Dr. Lueck presented a very interesting and rare case of disease to the Society. A young man, aged 22 years, affected with wasting of all the muscles of the body. The occupation of the young gentleman is teaching. About six months ago he first noticed that his hand would get easily tired in writing; at the same time he perceived that the ball of the right thumb had nearly wasted away. Having a walk of two miles to his school, which used to be nothing to him before, it now made him quite weary, so he rode on horseback. However, gradually he felt his weakness increasing, so that after a little while it was impossible for him to manage his horse, and he had to abandon his occupation. This wasting progressed continually, so that now his muscles are reduced to less than half of their former volume. Respiration is labored and sometimes sighing only, from want of power in the respiratory muscles; for the lungs and heart are sound. The excretions are healthy. The urine has been tested for sugar by Moore's and Trommer's test, however, with negative results. And heat and nitric acid have shown that there is no albumen in it.

The diagnosis, according to Niemeyer,* is Progressive Muscular Atrophy.

The Doctor drew the special attention of the members to the difference between this disease and that known as *Progressive Locomotor Ataxia*. In locomotor ataxia, the power of co-ordinating the movements of the body to the will is lost; thus, for instance, the patient cannot walk with his eyes shut. Our patient walked several times across the floor without stumbling. In ataxia the nutrition is the last that is affected, generally only after the disease has lasted for years. Here the wasting came first, and from it resulted the lack of power. Again, the cause of ataxia is found in the nervous system; if the muscles are affected, they are only so secondarily, but in this case the muscles are primarily affected, and the nervous system not at all.

The treatment of the patient is of a tonic kind, viz.: Phosphorus in cod-liver oil and strychnia internally, and electricity with friction externally.

This being an annual meeting, the following officers were elected for the next year:—

President, Dr. E. M. Rodgers, of Hartford.
Vice President, Dr. L. Loehr, of Theresa.
Secretary and Treasurer, Dr. A. W. Lueck, of Mayville.

Address.

Dr. Marston, the retiring President, delivered a very able address, in which he gave a vivid sketch of the position of the physician in ancient and modern times. He especially contrasted the position of a regular educated physician with that of a pretender, and complained that we have no laws to stop the nefarious business of the quack. However, the Legislature has not proven to be the true remedy for this evil. It can only be vanquished, 1st, by a diffusion of medical knowledge among the people. Thus every nostrum should have the formula of its composition printed on the outside of every bottle, etc. And, 2d, the true physicians should not quarrel so much among themselves; especially the almighty dollar should not be *the* cause of difficulty. Promoting these points, we shall succeed in elevating the professional standing more and more.

Cerebro-Spinal Meningitis.

Dr. Senn was called upon to report cases of cerebro-spinal meningitis now under his treatment. He stated that the symptoms are those generally seen in this disease, viz., headache, vomiting, pulse from 70 to 140, always soft and compressible, followed, sooner or later, by the pathognomonic retraction of the head, and coma. He considers the disease to be caused by a peculiar poison introduced from without into the body and having a predilection for the spinal cord and its membranes.

He followed various plans of treatment, however, with no encouraging result; for more than one-half of his cases proved fatal. He has had the best success with a moderate antiphlogistic treatment in the beginning of the attack; then he used tr. cantharides and muriat. tr. of iron, and still later he relied on the bromide and iodide of potassium. During convulsions he employed the ext. of Calabar bean, in doses of 1-24 of a grain, every two hours, till perfect relaxation resulted, to the great relief of his patient.

The following resolution was introduced by Dr. Senn, and unanimously adopted:—

Resolved, That we tender our thanks to Dr. Marston for his able and eloquent address, and that he be requested to furnish a copy of the same for publication.

The President appointed the following censors:—

Drs. Senn, Loehr and Hunt.

The committee on time and place for next meeting reported in favor of meeting at Theresa on the second Wednesday of July. Adopted.

Cholera Infantum is the subject for discussion at the next meeting.

A. W. Lueck, Secretary.

* Pathologie und Therapie, Band II, seite 574.

Editorial Department.

Periscope.

Impacted Rectum in a Child Six Years Old.

Dr. S. C. Busey reported the following case, in the *National Medical Journal:*—

On the 8th of October, 1870, two girls, aged respectively 11 and 6 years, ate plentifully of a small grape, known as the chicken grape. The next day both complained of pain at stool, and the mother administered to each a dose of castor oil. Upon the eldest it acted freely, and brought away a large quantity of the seeds and skins of the grapes. The younger continued to suffer severe pain at stool, and at every effort a few seeds and skins were discharged. On the morning of the 10th I was called to see her. Found her playing with other children, free from pain, except at stool; appetite as usual, tongue clean, no fever no tenderness about the abdomen, no swelling, nor any hardness about the belly. Around the anus, especially about the coccyx, there was great tenderness. The mother said the child screamed with pain at stool. At every effort some fæcal matter passed, and that during each effort a hard mass of grape seeds and skins came to the verge of the anus, and immediately receded upon the subsidence of the pain and straining effort. I could not induce the child to make an effort at stool, though they occurred involuntarily hourly. Ordered the oil to be repeated, injections of tepid water per anum, and directed the mother to watch for protruding mass, and to seize it while the child was at stool, and, if necessary, to employ the handle of a spoon to disengage the mass. In the afternoon she reported that she had succeeded in taking away about a tablespoonful of the mass, and that a small quantity of fæcal matter had passed. The expectant plan of treatment was continued until the morning of the 12th without any abatement of the pain at stool, and without producing a free evacuation of the bowels. At my visit this morning the child had voluntarily returned to bed after a small breakfast, was slightly febrile, tongue slightly coated white, and somewhat reddened at the tip, slight tenderness along the course of the transverse colon was detected on pressure, and there were slight paroxysms of pain during the intervals of the effort at stool. Feeling that further delay was hazardous I introduced a bullet-pointed probe through the anus, and felt distinctly, an inch and a half within, a hard, firm, unyielding mass. Passing my little finger I felt the same mass, measuring about an inch and a half in diameter, and proceeded immediately, the left little finger being introduced into the rectum, with the aid of the spoon-pointed director (usually found in pocket cases), to extract the contents. During the succeeding half hour I drew out, in broken masses, a pint of grape seeds and skins, unmixed with fæcal matter, and apparently unaffected by the digestive process. During the operation the sphincter relaxed completely, about a drachm of blood oozed away, and much pain was occasioned the child. She was put to bed, a small dose of oil administered, and with a view to wash away any remaining seeds and skins, to arrest any hemorrhage, and to abate any tendency to inflammation, occasional enemas of water, at ordinary temperature, were ordered. During the afternoon the child had a free evacuation, and arose from bed to play with other children. She has continued perfectly well since.

The points of interest presented by this brief report consist—

1. In showing the extent of impaction to which the rectum may be subjected without producing any alarming or severe symptoms, and the length of time it will tolerate such impaction without the supervention of inflammation.

2. The value of the voluntary effort at stool, which enabled the elder to disengage a mass equally firm, and perhaps larger, of the same materials.

3. The indigestible nature of the materials ingested, and, consequently, showing the extent of toleration, by the digestive tube, of a mass of indigestible material without discomfort.

4. The folly of tentative treatment when the condition is recognized, and the importance of rectal examination, especially in children, when constipation follows the ingestion of indigestible substances.

The fæcal matter represented to have passed subsequent to the eating of the grapes, and after the administration of the oil, must have been below the grapes. The material must have been collected and become impacted below the sigmoid flexure, or else a tumor would have been discovered in the left iliac region; and, furthermore, it seems impossible that such a hard and unyielding mass could have passed through the flexure. This view seems confirmed by a consideration of the facility and rapidity with which the rectum absorbs the liquid portion of fæcal matter. The frequent desire to go to stool seems only to have followed upon the descent of the materials into the rectum, and ceased before the dislodgment of the impacted mass. Defecation is a reflex movement, due, in a healthy condition of the intestinal tube, to the presence of fæcal matter in the rectum. In this case there does not seem to have been any derangement of the

peristaltic actions of the bowels, or of the reflex movement of defecation, but that the latter was insufficient to expel the mass; consequently, it collected and became impacted in the rectum. The stool succeeding the removal of the mass contained no seeds or skins of the grapes.

Operation for Urethral Stricture.

The venerable Dr. J. P. METTAUER describes his operation for stricture as follows, in the Boston *Medical and Surgical Journal:*

For many years the writer has paid particular attention to the disease, during which time numerous cases were treated by him, all of which were carefully studied and subjected to the most rigid and careful scrutiny. In a very large majority of the cases treated the strictures were very close, and many of them penetrated with much difficulty, even with the instruments best adapted to such conditions; and out of more than two hundred examples he has met with only four which could not be penetrated; and as these cases required a peculiar mode of treatment, which he presumes to denominate the rapheo-perineo-urethral section, this paper is designed to report them to the profession.

CASE I.—M. Y., the subject of this case, was a farmer, æt. about 30, who had enjoyed excellent health down to the time he became strictured, when it seemed somewhat impaired, but not enough so to confine him to his room, or even to unfit him for his ordinary avocations. The stricture had existed upwards of two years before the writer was consulted, but only in a slight degree until three months before the writer treated the case, at which time it began to close the urethral passage with considerable rapidity, seeming to render micturition more and more difficult daily; and when the suffering man arrived in my neighborhood he could only urinate by drops. A critical examination of the urethral passage disclosed the existence of an exceedingly close stricture in near proximity with the membranous portion of the canal. Many and varied trials with bougies, catheters, and probes, failed to penetrate the stricture; and the difficulty in discharging the urine threatening retention, it was determined to cut down upon the stricture, through the perineum, along the rapheal line, which was done in the following manner on the 11th of August, 1836.

The patient was placed on his back, resting upon a common dining table covered with folded blankets, as in lithotomy. The feet and legs were held and supported by an assistant standing on each side. A female sound, well oiled, was first entered at the meatus and carefully passed down to the stricture, with the hollow of the curve to the symphysis, where, after gentle probing movements, to determine that it could be carried no farther, the hollow curve was turned from the symphysis, so as to render its entered extremity prominent in the perinæum, and so held by an assistant. An incision was now made through the perinæum along the rapheal line down upon the extremity of the sound, which allowed the end of that instrument to appear through the wound. A grooved director of small size was next entered and passed on to the extremity of the sound in the urethra, the latter instrument being simultaneously partially withdrawn, to make room for the director, which was made to follow it about an inch. With the groove of the director to the rapheal line, and a sharp-pointed narrow bistoury directed by it, the urethra and perineal strictures were laid open fully an inch, which, after the blood was cleared away, brought into view an exceedingly minute opening, rendered more clearly distinguishable by the passage of a few drops of urine, situated on one side of the urethra, and fully three lines above the bottom of the cul-de-sac. This orifice was now dilated with the point of the bistoury, so as to allow the director to be introduced, which entered readily and was carried quite into the bladder and upon it, by rotating it, the stricture was divided on four sides. Removing the sound and director, and sponging away the blood, a No. 12 gum catheter, well oiled, was introduced from the meatus through the divided stricture quite into the bladder, which, after closing the perineal wound with sutures of leaden wire deeply inserted, completed the operation, with the exception of adjusting and confining the catheter in the urethra and bladder, washing out the vesical cavity with cold water to cleanse it of blood, and adapting a stopper to the catheter to prevent accidental discharges of urine. The patient was confined in bed until the perineal wound healed, cold water dressings were employed to the wound by the use of compresses, the bowels not allowed to be disturbed for four days, and a diet of liquids was enjoined. The wound healed in a great degree by the first intention, but the ligatures were suffered to remain until a fresh tube was introduced on the twelfth day. In three weeks the patient had recovered entirely, and without a single untoward occurrence, and is yet alive, a hearty old gentleman of over sixty-five years of age.

CASE II.—M. D., æt. about 28, of rather delicate constitution, of slender person, free habits, and a tailor by profession. Early after puberty he contracted a terrible gonorrhœa, and either from bad management or imprudence his cure was tedious. Soon after recovering from his attack of gonorrhœa he married, and for a year or more his habits were less dissipated, and his health somewhat improved; yet he was an infirm man, and often complained of his urinary organs, especially in regard to unpleasant sensations in urinating, with increased desire to evacuate the bladder, and a perceptible diminution of the volume as well as force of the stream. At length the case assumed more threatening characters, urina-

tion becoming difficult in a marked degree, and the stream so much disordered as to appear mere dropping most usually, attended with painful straining very often. In this condition the gentleman visited the writer from a considerable distance, and the night after his arrival he was threatened with retention from fatigue, which, however, was relieved spontaneously after much suffering. After a day's rest an attempt was made to pass the obstruction of the urethra, which was seated very deeply in the canal; and for the purpose very small catheters, both metallic and gum-elastic, bougies and probes were employed. The exploration was attended with much difficulty, and protracted trials, variously modified, resulted in complete failure. Regarding the case impenetrable permanent stricture, and believing from the trials already made that the perineo-urethral section was the only safe expedient offering a chance of relief, and the patient having consented, the operation was performed on the 13th of April, 1840, and very nearly after the manner of that adopted in Case I. From the great depth to which the female sound was carried, it was to have been supposed that the obstruction was in near proximity with the prostate gland; accordingly, when the urethra was laid open, the membranous portion immediately at the prostrate was found to be the seat of the stricture, and the bistoury, at the same time that it entered the urethral canal, also penetrated the contraction, as announced by the escape of urine in considerable quantity. A careful examination, after enlarging the wound in the direction of the glans and dilating it, disclosed the fact that the stricture was at the prostatic extremity of the membranous portion of the urethra, and that it as well as the corresponding extremity of the prostate had been incised. After enlarging the opening in the stricture with the bistoury, the female sound, previously removed from the urethra, was passed into the bladder through the newly formed opening, which, being large enough, a No. 12 gum catheter was introduced from the meatus through the divided stricture fairly into the bladder, without the slightest difficulty, where it was confined, as in Case I. The perineal wound was sponged out and closed with leaden sutures deeply inserted, as in Case I, and the sequel of the treatment, in all respects, was that adopted in that case. This patient recovered perfectly in three weeks, and is yet alive and a healthy old man.

Remarks.—Penetrable stricture of the urethra, formerly so difficult of successful treatment, in the hands of the writer has been found quite manageable in a vast number of instances. Indeed, he will say, without egotism or boasting, that his first case of failure is yet to occur. Even in examples of the impervious description he has been invariably successful. An account of his mode of treating penetrable stricture was published in pamphlet form many years since, with diagrams of the instruments employed by him; and the mode of operating described in that monograph, as well as the instruments, are the same he now employs. It is true he has improved the instruments greatly, but they are virtually the same in principle as well as in form. As now practiced by the writer, the operation for pervious stricture is the neatest and most beautiful operation in surgery, with the single exception of couching in cases of solid cataract; and it is comparatively painless and bloodless, as well as entirely free from danger to life.

Successful Cure of Cerebro-Spinal Meningitis.

The annexed case is reported by BORLAND, in the Boston *Medical and Surgical Journal:*—

W. E. M., aged 17, a resident of 32 Albany street, Boston, was admitted to the Boston City Hospital, coming under my care on the 13th day of last January. He was delirious, and the history of the case could only be made out from his friends, who stated that he had been an active, energetic boy. About a fortnight before he was taken sick he commenced work as a carriage painter, but was during this time employed as the youngest apprentices at such occupations not unfrequently are, in the performance of a variety of odd jobs. On the 6th of January he felt poorly, with chilly sensations lasting all day. On the next day, when stowing away some coal, he became so ill that his employer noticed it, and sent him home in the middle of the forenoon. H went to bed delirious, with intense headache, pain in his neck and upper part of his spine, which became stiff, with head drawn back sharply between the shoulders. During this week he had involuntary dejections and micturition.

When he was admitted to the hospital, his head was fixedly drawn backwards. He was noisily delirious, though he could be compelled to return to a temporary lucidity, but on ceasing to put imperative questions he at once relapsed into loud shouting delirium, calling imaginary names, cursing, complaining of his head, then wailing, whining, simpering. He was constantly opening his eyes to their fullest extent and then closing them tightly. Light was evidently painful, as was sound, for if any one spoke in a loud tone near him, he would instantly beg them to hush. He had dried blood about his nostrils, as if from previous nose-bleed. His lips were dry and cracked. There was much sordes on the teeth. His tongue was dry and glazed at tip; dry and heavily coated on the back part. The skin was not very hot; there was a scattered acne over the upper part of the chest and shoulders. Any movement of the patient on to his side caused loud complaints of pain in the head, neck and back. In the evening his pulse was 100. Respiration 36. Temperature 101½°.

Jan. 14th. There was internal strabis-

mus of the right eye. Tongue dry, glazy and brown. Pulse tended to reduplicate. There were about the neck, forearms and wrists faintly marked reddish livid blotches, but no real maculation of the skin noticed, nor was it at any later period. Nothing very marked about pupils. Temperature in A. M., 102°; in P. M., 102½°. Pulse ranged from 104 to 96. He was ordered fluid ext. ergotæ, fifteen drops every four hours; sol. brom. potass., twenty grains every four hours, alternately. Evaporating lotion to head and heaters to feet. To be fed with broths, soups, milk, etc.

Jan. 15th. Delirium of same character, but less noisy. Strabismus, with constant opening and shutting of right eye, continues. No return of nose-bleed. Teeth covered with thick sordes. Tongue very heavily covered with thick, yellow, foul coating, and deeply seamed with fissures. Bowels costive. Still involuntary micturition. Pulse 68 to 72, and sufficiently strong. Temperature 99°, in the evening. ℞. Pulv. jalapæ, hydrarg. submur. aa gr. vij. M., at night; and to be thoroughly washed with soap and water, and rubbed with spirits.

Jan. 16th. Learned to-day that he inherits consumption on the father's side, and that his father is now sick with chronic lung disease. The patient seemed duller and quieter than before, but answered questions rationally. The pupils were somewhat dilated, but responded slowly to light. He said that the headache was lessened. Head still retracted, though the neck, if anything, is less stiff. Bowels freely evacuated after an enema. Sordes flaking off a little from tongue and lips. Pulse varied from 76 to 104. Temperature 102½°.

Jan. 17th. Only difference was that the eyes were less dilated until late in the evening, when the temperature rose to 103½°; noisy delirium, and complaint of headache returned. After a while became quiet, but was wakeful and restless all night.

Jan. 18th. He was more stupid. There was a want of expression of the right side of the face, suggesting facial paralysis; the right nostril a little dilated, and the right eye more staring, though still winking and with internal strabismus. His tongue rather less coated. Pulse 92. Temperature 102½°.

From this date to the 24th of January his condition slowly improved. Temperature gradually falling to the normal point.

On the 24th he was, at the visit, sleeping; not roused by loud talking, allowing eyelids to be raised without awaking him. He could be roused enough to answer a question, but instantly fell off into his lethargic condition, which lasted until the 29th, during which time his pulse was feeble, about 80 to 90. Temperature a little below the normal point. Sordes disappeared from mouth, tongue becoming bright red. Skin was dry and harsh, involuntary dejections and micturitions continued and bedsores formed. Ergot and bromide treatment was omitted on the 26th, and sulphate of quinine gr. i. given three times daily.

Jan. 31st. A record of no marked change except rather more mild delirium, but on February 4th the record was: Patient becomes entirely rational and natural. Pulse 86, good strength. Temperature 99½. Countenance bright and natural. Skin cool, soft, natural. Tongue clean, no sordes, no strabismus, or facial paralysis. Motions of head free; no cervical tenderness. Appetite good. Able to feed himself. Has regained control of bladder and bowels. Only suffering and complaint is from bedsores. He was put upon the syrup of the hypophosphites of lime, soda, potass. and iron, ʒi. three ter diem, quinine being omitted.

Since the last date patient has steadily progressed in his convalescence, and he is able to walk about. Bedsores healed, and mind perfectly clear. He was afterwards discharged, well.

The Diagnosis and Treatment of Alveolar Abscess.

This affection is described as follows, in *The Dental Cosmos*, by Dr. FRANK ABBOTT:

The symptoms of acute alveolar abscess are, first, a slight tenderness on occlusion of the teeth, or on percussion with an instrument. On inspection, a marked discoloration of the tooth is perceptible. The soreness (which is soon accompanied by pain) rapidly increases, so that in from twelve to twenty-four hours the tooth will be slightly projected, and so excessively painful to the touch that the teeth cannot be brought firmly together. These symptoms are accompanied by an increasing throbbing, diffused over the side of the head and face, and slight febrile action. About the fourth day after the original tenderness, the patient will experience rigor, loss of appetite, and excruciating pain, which pain lasts from two to four days.

During this latter period the alveolus has been undergoing perforation. When the pus has reached the soft parts, the pain materially subsides. The gums and face begin to swell, increasing rapidly.

From that time we have all the symptoms of an abscess in soft parts in general, such as fluctuation, etc. "When evacuated, the pus is found to be thin, with traces of blood coming from the centre;" and from the surface cut, or walls of the tumor, the bleeding will be quite profuse.

In the chronic variety there is, first, a slight tenderness of the tooth, which increases very slowly, and sometimes appearing to improve even. The pain experienced during perforation of the alveolus is slight, preceded by very little or no throbbing. The swelling of the gums and face occurs much slower, and to a much less extent, than in the acute; and when evacuated, the pus is thick, with very little if any traces of blood, either from the centre or walls of the tumor.

The symptoms of the false variety are, first, a tenderness of the gum at a point opposite the upper third of the fang of a tooth; on occlusion of the teeth, or on percussion

with an instrument, slight periostitis is observed. The gum swells rapidly, but to a limited extent; the substance of the gum over the point of irritation being thin, the abscess very soon points, or comes to the surface, and is evacuated. The pus is thin, resembling very much that discharged from the acute form of the true, but very slight in proportion.

Treatment—This may be divided into local and constitutional. The local consists in abortive, palliative, and curative measures. The abortive may be resorted to in the early stages of the morbid action, when the tooth is tender, projected, and discolored. It consists in opening the pulp-chamber by drilling through the crown of the tooth. This, however, must be done at any stage; but if performed early, it will abort the external abscess.

Palliative measures consist in relieving pain, and limiting destruction of tissue. Pain may be controlled by hypodermic injection of morphia, from one-eighth to one-fourth of a grain, morning and night. Limitation of destruction of tissue may be effected by the direct application to the gum of a solution composed of Fleming's tincture of aconite root and tincture of iodine, equal parts, two or three times a day, with evacuation of the pus, as soon as fluctuation can be detected. Curative treatment is only applicable after the pus has been evacuated; it includes the removal of the source of irritation, viz., the dead pulp, and the thorough introduction of antiseptic solutions into the pulp canals and abscess.

The most reliable solutions for this purpose are permanganate of potassa, grs. x to water ℥j, followed by carbolized oil, one part of carbolic acid to fifteen of olive oil, introduced in the following manner: an instrument small enough to pass readily through the entire length of the canal is employed, on which is wound a bit of cotton; this being dipped into the solution and forced into the canal, acts as a piston, and thus the abscess and fistulous opening are filled with the remedy. Where the canals are flattened so as to prevent the perfect adaptation of the piston, they may be introduced by saturating a pellet of cotton with the solution, placing it into the cavity of the tooth, then with a piece of partially-softened wax placed over the orifice of the cavity, and pressed upon the cotton; the solution contained in it is readily forced through as desired, one application often being sufficient to effect a cure.

Constitutional treatment embraces attention to the primæ viæ, allaying undue febrile action by arterial sedatives, and insuring a proper supply of nutritious food as convalescence progresses.

In syphilitic patients with chronic abscess, iodide of potassium is the sheet-anchor, in doses of v to xx grs. three times a day.

In scrofulous patients cod-liver oil, ℥ss three times a day, and syr. ferri iodidi from gtt. x to ℥-s three times a day, may be advantageously employed. The two may be taken together.

The treatment of false alveolar abscess consists chiefly in removing the calcular deposit, and the use of astringents on the gums. Its removal should always be accomplished by mechanical means, not by chemical action, as is the case in the uses of acids, as the substance of the tooth is very seriously injured thereby.

Treatment of Rheumatism by Sedatives.

In an article in the *Kansas Medical Journal*, on "Tranquilization as an Element of Cure," Dr. TODD cites these illustrations:—Still more remarkable—confirmatory of what has already been said, but especially as illustrating the value of combined effects from components of the several classes known as cerebral stimulants, nervous sedatives, and cerebral sedatives—are the results had in some cases of acute articular rheumatism, coming under our observation within the past few months; remarkable from the fact that the disease in the three cases we shall cite was apparently *cured*, not suffered to "wear i self out," and also for the inexpressible comfort afforded the patients, and the rapidity and completeness of their recovery.

A CASE OF ACUTE ARTICULAR RHEUMATISM.

H. H., an impecunious wretch, aged about 28 years, was suddenly seized with rigors, which continued for twenty-four or thirty-six hours. Saw him soon after the rigors began; found the skin hot, urine scanty, and the tongue thickly covered with a yellowi h-white coating. Gave a mercurial cathartic, to be followed in a few hours by tartrate of potassa and soda, which resulted in free catharsis. At bedtime administered a full dose of morphia. Saw him again the following morning; had slept but little. Both wrists and elbows and one knee were now greatly swollen, and his suffering was intense. Injected one-fourth grain of morphia and one-fortieth grain of atropia near the swollen knee-joint, and prescribed equal parts of laudanum and fluid extract of colchicum, twenty drops in sweetened water, every three hours. Saw him again in the afternoon, and repeated the injection near to another swollen joint. In the evening, forty-eight hours after the attack, the ankles and knees, wrists and elbows of both sides were greatly swollen, and intensely painful. To be brief, he had injections of morphia and atropia, the latter to the extent of impairing vision, twice every twenty-four hours, selecting a new point at each insertion; the laudanum and colchicum every three, four, or six hours, and an opiate every night for the first five or six days. At the end of this time the colchicum mixture, purging him too freely, was discontinued, and soon after the subcutaneous injections also were omitted. Opiates were continued for a few evenings longer, and the wife was still allowed to please herself with the use of liniments, which she had used most assiduously from the beginning. In ten days from the date

of the attack the pain and swelling had almost wholly disappeared, and the patient was able to leave his bed; and in six days more he ran away, leaving his medical and board bills unpaid. With the ordinary treatment, we think this man would not have run away under ten or twelve weeks.

TWO MORE CASES OF THE SAME.

The next case was that of H. P. S., a railroad contractor, who contracted his rheumatism from exposure. He came home from the line of his duties feeling indisposed, and fearing an attack of fever. An active cathartic was given at bedtime. Early in the morning rigors supervened, and the joints of both legs and both arms were found to be swollen and painful. During the day and night following, the disease fully developed itself; the limbs were greatly swollen, the skin hot, and the pains quite agonizing upon the slightest attempt at motion. The treatment was similar in all respects to that of the case first mentioned, excepting that chloral in drachm doses added to the morphia constituted the evening dose, from the effects of which he always slept soundly, lying wholly upon his back. After the third day a considerable abatement of intensity occurred, and by the eighth day the pulse had nearly resumed its normal character, pain had ceased, and the swelling was fast disappearing. He left his bed on the twelfth day, and our visits were discontinued on the fourteenth.

The third case happened in the person of D. H. E., a merchant. In violence this case fully equalled either of the two foregoing cases. Its irruption was marked with rigors, followed by a hot skin, furred tongue, thirst, and rapid swelling of the joints, as in the other cases. The treatment was precisely the same as in the last. In three days he was almost free from pain, and from this time the swelling and other symptoms rapidly subsided, so that by the seventh or eighth day he was able to stand upon his feet, and twenty days after the commencement of the attack he walked the streets without crutches. In none of the cases yet treated in this manner have we been able to detect cardiac complication.

Reviews and Book Notices.

NOTES ON BOOKS.

The Literary Monthlies.

Among the regular visitors to our sanctum are *Scribner's Monthly*, The *Atlantic*, *Harper's Magazine*, and *Our Young Folks*. They all have their peculiar excellencies, and, indeed, we value them so highly that we have files of each of them from the commencement. For ourselves *Scribner* has been the favorite, but each has its advocate in our family. They are *all* good. The illustrations in *Scribner* and *Harper* are particular attractions, and deserve commendation for their excellence. They comprise a pictorial history of the times, with an occasional glance at ancient history, as in *Harper's* for July, which contains beautiful illustrations of DI CESNOLA'S recent remarkable antiquarian discoveries in the island of Cyprus.

BOOK NOTICES.

A Practical Treatise on the Diseases of Infancy and Childhood. By THOMAS HAWKES TANNER, M. D., F. L. S., etc. Third American Edition, from the last London Edition, revised and enlarged by ALFRED MEADOWS, M. D., London, etc. Philadelphia: Lindsay & Blakiston, 1871. 1 vol. 8vo. Cloth. pp. 559. Price $3.50.

The works of the late Dr. THOMAS HAWKES TANNER are favorably known to the profession for carefulness in compilation, and a very thorough literary treatment of his subjects. Possibly they lack somewhat in showing an extended experience on the part of their author. But they are excellent guides, nevertheless.

His present essay on the diseases of children has received a careful revision by Dr. MEADOWS, and having used it ourselves as a work of reference, we are enabled to speak unhesitatingly in its favor as a practical treatise, abounding in useful suggestions, and well up to the present position of infantile therapeutics. The fact that this is the third edition in this country is also to be regarded as a voucher for its value.

AMERICAN MEDICAL ASSOCIATION.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

WM. B. ATKINSON,
Permanent Secretary.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, JULY 13, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

☞ Quite too many of our subscribers, many of them old, personal friends, are in arrears on their subscriptions, aggregating a large amount of money that we ought to have in order to a vigorous prosecution of our enterprise. These parties are requested to settle their accounts immediately, or at least communicate with us at once—for, instead of at present further enlarging our edition to accommodate new subscribers, we shall resort to the expedient of dropping the unprofitable ones, and putting their bills into the hands of a collector. *

THE MEDICAL VIEW OF ABSTINENCE.

The published letter of Dr. BEARD, of New York, to which we devoted some editorial comment (see REPORTER, last volume, page 288), has been noticed at length by Dr. ANSTIE, in the *Practitioner* for May, and in highly commendatory terms. He makes it the text for a general discussion of the temperance, or rather total abstinence reform, and advances some views and inquiries which deserve our most attentive thought.

However strongly we feel the importance of temperance to the moral and physical welfare of the race—and we concede to none more earnest desires in that direction—we are not the less convinced that an avoidance of *truth*, a denial of facts, or a habit of deliberate mental bias, will not benefit this or any other good cause. Therefore we lay before our readers Dr. ANSTIE'S inquiries, not with the intention of either supporting or refuting them, but from a desire to see this leading sanitary question fully understood and discussed from its scientific as well as its merely moral aspects. As physicians we are better able to appreciate the weight we must give to physical impulses in estimating moral conditions.

Dr. ANSTIE asks:—

"1. We want to know how they can justify the statement, everywhere repeated by their speakers and writers, that alcohol is nothing but a poison. If they are ignorant of the results of recent research, we can only say that they have no right to be uninformed and at the same time teachers. If they are not ignorant, they are aware that alcohol is a hydrocarbonaceous substance, which can be taken in considerable daily quantities without provoking any other visible reactions than those which follow the ingestion of any hydrocarbonaceous food; that there is no known example, in the whole scope of our experience, of such a substance, not an aliment, being so dealt with by the organism; and, finally, that there is positive evidence that life can be sustained by alcohol, in the absence of all other nutriment, for a considerable period.

"2. We want to know what reasonable grounds the teetotallers have for treating drunkenness as a vice of altogether different type from a number more which depend on over-indulgence of the appetites. If they are ignorant of the facts which medical observation teaches on this head, again we say they have no right to lay down principles. If they *have* studied the history of the human nervous system and its weaknesses from a medical point of view, they must know that the tendency to drunkenness is, in by far the majority of cases, only one phase of a defective moral tone (very often congenital), which might just as easily have

shown itself in half-a-dozen other forms of vicious self-indulgence.

"3. Again, we ask the teetotal party, in all seriousness, how they can venture to argue upon the causes which keep up or extend (if extended it be) the prevalence of drinking, while ignoring the prodigious impulse to luxuriousness of all kinds, and not merely to alcoholic indulgence, which the special circumstances of our modern society supply. Viewed as the physician is compelled to view it, that society is seen to be dominated by one influence, above all others, which tells upon the most widely different classes with results that are substantially identical.

"There is another aspect, however, of the teetotal views which, to men of science and men of the world (in that better sense which implies a wide knowledge of and sympathy with humanity) makes them appear more hopelessly unpractical than ever. We refer to the essentially *feminine* or *clerical* way of regarding humanity and its weaknesses, which lies at the bottom of the belief that total abstinence can be usefully applied to society in general, as a measure of reform and precaution. The principle of asceticism as a remedy for the weaknesses of persons who are already thoroughly degraded in their moral sense, has a value which we all acknowledge; it is strictly analogous to the forced detention of a lunatic asylum; but it is a barbarous remedy, that has failed in every age when applied to the moral nature."

After supporting the views which these inquiries indicate, at considerable length, he closes thus, speaking of forcible restraint:—

"The great lesson of life, that of self-restraint, is not to be learned in this way; on the contrary, the learner is taught an altogether false confidence in what seems a talisman, or charm, to keep him always right and safe. We entirely agree with Dr. BEARD that such expedients can never serve more than a temporary and inferior purpose; and we are weary for the day when these one-sided plans for improving human nature will be seen, even by their present promoters, in their true proportions. How long are we to look for our real reformer, our 'vieux pêcheur qui saura consoler les pêcheurs,' because he will show a genuine knowledge of the flesh and blood of which all humanity is built, and will frankly admit that human nature, as we actually see it, never very precisely resembles either that of the spiritual sheep or the spiritual goat, but rather is an uncertain and varying mixture of them both?"

We are beginning to understand that in many instances inebriety is a constitutional weakness, limited to a small minority of the human race, a minority whom alcohol attracts with the charm of the basilisk, and poisons with the venom of the adder. Before us lies a circular headed, "The Disease of Inebriety," from Dr. ALBERT DAY, Superintendent of the Greenwood Institute for Inebriates. After speaking of what temperance societies, etc., can do, all praiseworthy in their way, he says:—

"It is evident that however useful all those influences may be, as *mere outward helps*, something more is needed: for, even admitting inebriety to be merely a mental disease, a species of insanity, inherent or acquired, by some means of which the patient has no knowledge, yet, such are the peculiar relations of mind and body, the abnormal condition of each acting on the other, that while the morbid developments of the physical system, which result from inebriety, will effectually paralyze all efforts at restraint, the continued indulgence, which the patient is powerless to deny himself, will daily aggravate those infirmities, which render resistance impossible. No effort for renewed self-control can be made, therefore, with a chance of success, without the help, so far as possible, of a healthy system, both mental and physical.

* * * * * *

"The *will* must be stimulated and strengthened up to the point of total abstinence, by removing, through all the resources of medical and psychological skill, everything which has undermined it in the past, or may enfeeble it in the future. When the power of will once more asserts itself over appetite, or, in other words, when the power to practice total abstinence is attained, it is of little practical importance whether the appetite lives or dies.

The method of cure consists, therefore, in applying the proper remedies to the physical condition, thus removing every weakening influence which past indulgence might have over the will. Then, when the physi-

cal system is in the right condition, leaving the mind entirely free, let no man, however long he may have been a slave of appetite, imagine that he is the helpless victim of destiny; he can have power over himself to repress the cravings of his appetite, for human will counts for something, not only in the modification of physical nature, but in the modification of a man's own nature."

These words explain more clearly than most utterances we have met with, the true philosophy of preventing drunkenness. What avails the teaching which does not strengthen the will, but simply seeks to remove it from a chance of exercise? Do we, in training the body, carefully guard it from use, or do we accustom the powers to vigorous, self-reliant exercise? Is it not time the mediæval notion that we should shut ourselves up from contact with evil be supplanted by that nobler doctrine which bids us steel our nerves for the encounter by daring and by conquering? No permanent victory crowns the warrior who saves his army by constantly shunning the combat.

The plan recommended to cure the inebriate is also the plan, with necessary modifications, to prevent his fall. But it is at least questionable wisdom to insist that, because a small minority of the human family grossly abuse an element, the whole use of it should be forthwith, without further examination, laid under ban.

Notes and Comments.

The Alkaloids of Opium.

A careful examination of the numerous alkaloids of opium has enabled M. Rabuteau to classify them in reference to their physiological effects as follows, in the order of their power on the human subject:—

Soporifics.—Morphine, narceine, and codeine. The other alkaloids do not produce sleep.

Poisons.—Morphine, codeine, thebaine, papaverine, narceine, narcotine.

Analgesics.—Narceine, morphine, thebaine, papaverine, codeine. Narcotine does not seem to diminish pain.

Anexosmotics.—Morphine, narceine. None of the others have the power of arresting diarrhœa.

Meconine and meconic acid appear to be entirely inert.

"Crowner's-Quest Law."

Some weeks since a man was found dead near West Overton, a village in the interior of Pennsylvania. A jury was called and an inquest held. In their verdict the jury declared "that on the person of this young man there were no external marks of violence, but that the said jurors and the said justice of the peace have strong suspicion and firmly believe that, from the evidence adduced, the deceased came to his death from internal violence, or an unlawful act."

In order to ascertain why a post-mortem examination of the body had not been made, and why justice had not taken the rightful steps to secure this man's murderer, a representative of the press visited Mount Pleasant, a village three miles distant from West Overton, and where resides the party who acted in the capacity of coroner.

He said it was the first inquest he had ever held, and he wasn't as well posted as he might be. That he firmly believed the stranger had been poisoned, but he was deterred from ordering a post-mortem examination owing to Dr. M. B. Gaut, of that place, asserting that it would cost $500 to discover the poison in the stomach, and that the analyzation would have to be conducted in Philadelphia. This settled the matter.

So much for the way inquests are held under our present system.

"*2d Clown.*—But is this law?

"*1st Clown.*—Ay, marry is't; crowner's-quest law."—*Hamlet, Act V, Scene I.*

Healthy Sites.

A writer in an English exchange remarks on the taste many have to erect their ancestral domicile in the "navel of a wood," with the result of breathing a confined and shut-up air. As one consequence of this, colds and catarrhs are rife after every great and sudden change of temperature. The healthy rays of the sun, too, which have been apostrophized as the automatic bath of Nature, obtain little or no entrance upon the scene, save when, at their full power, they shine down upon the roofs and verandahs. Here they could be dispensed with. Now a well-placed mansion will be found to be upon a

gentle slope, with no obstruction to the lateral external ventilation. It will, however, be sheltered from the most obnoxious winds. It will also lie almost due north and south, so as to make the most of the morning and evening sun. The breakfast room will be on the east, not on the north side; for to that aspect will be consigned the stores on the ground-floor and basement, and the baths and closets on the bedroom floors. If the maximum of comfort is to rule in the house also, the dormitories will not derive their light from the north. The drawing-room, for a patent reason, will be constructed in the sunny south, with its adjunct, the conservatory; and in the sleepy west, the dining-room, with its appendage, the billiard-room. There are very few wise departures from the above rules.

Use of Emetics in Typhoid Fever.

Recently, at a meeting of the Surgical Society of Ireland, Dr. HENRY KENNEDY read a paper on the use of emetics under certain circumstances in continued fever, and ther acute diseases. His attention was called to the subject by observing good effects after the administration of an emetic in two cases. A boy, aged fourteen, had pyrexial symptoms, an enormous mass of enlarged glands encircled his neck, and there was also some nausea. To meet the indication afforded by the last-mentioned symptom an emetic was given. The glandular swelling rapidly subsided. In a lady, suffering from phthisis, nausea occurred; an emetic removed this symptom, which did not return for many months. Dr. KENNEDY was then led to try the remedy in certain cases of acute disease. A girl had considerable secondary fever after scarlatina. Nausea and vomiting recurred frequently on her awaking from sleep. An emetic was given, and the patient made a good recovery. In this instance the symptoms were presumed to arise from the swallowing of exudation from the nose and throat during sleep. A fourth example was met with in the bronchial affection of typhus. In a fifth case an emetic, given on the seventeenth day of typhoid, acted remarkably well. The sixth case was also one of enteric or gastric fever, in which relapse occurred. The seventh, one of typhoid, was complicated with a diphtheritic affection, and threatened gangrene of the feet. Symptoms of relapse also appeared on the thirty-fourth day. An emetic was given, and stimulants freely administered. Dr. KENNEDY believed that mildly stimulating emetics were sometimes indicated in advanced stages of typhoid fever which presented a tendency to relapse.

The Influence of Soil on the Spirits.

It is a curious fact that some soils seem to exert a depressing, others an exhilarating effect on the spirits. Some, for instance, and notably those of volcanic origin, as where tufa abounds, cause a considerable amount of depression of spirits and fatigue of body. A hint was even thrown out, that to travel for any very considerable time upon asphalted roads and pavements brought about a similar feeling of weakness, which only a change to the macadamized or paved roads would alleviate. If this be true, it will not do to use asphalte for the paths in our flower-gardens, as many of us are thinking of doing. A strange sense of fatigue and dejection has even been experienced by the dwellers upon the indurated clays or *rab* soils of Wales, which a short sojourn on the Silurian limestone or old red sandstone dispels. The alluvium deposits of Bordeaux have also been known to cause continual sleeplessness in some visitors to that city, for which a railway trip was the only cure.

Medical Use of Muriate of Lime.

This salt was the subject of a paper before the Medico-Chirurgical Society of Edinburgh, by Dr. WARBURTON BEGBIE. He detailed briefly the chemistry and the preparation of the salt, its past history as a remedy, sometimes greatly praised, again unduly forgotten, and then gave his own experience of its value as a remedy in those cases of scrofulous glandular enlargement in which cod-liver oil and iodine were either not well borne or had failed. Without undervaluing cod-liver oil, there are cases where it did not suit the patient, and many in which iodine was not useful. In these the muriate of lime, in doses rising from twenty minims of the solution, given in milk or water after meals, was of great value. Dr. BEGBIE concluded by a graceful tribute to the memory of his father, who entertained a high opinion of the usefulness of the drug. A discussion ensued, in which Dr. JOHN MOIR, Dr. STEPHENSON, and Dr. BRECKENRIDGE gave their opinions as to the value of muriate of lime from a clinical point of view; and Dr. T. R. FRASER pointed

out that, from *a priori* reasoning, and from our knowledge of the chemistry of the blood, the muriate was the best salt of lime to administer, and the one most likely to have a good effect in nourishing the frame.

A Splendid Inkstand.

We have received from the Cleveland (Ohio) Inkstand Company, one of CATLIN'S Combination Atmospheric Inkstand, Mucilage Stand, Sponge-cup and Pen-rack. It is a most complete affair. Not a particle of dust, or even dry air can get to the body of the inks or mucilage. The company manufacture one hundred and ninety different sizes and prices, all operating on the same philosophical principle. The one sent us is No. 1 of their catalogue, containing bottles for three different varieties of ink, a mucilage, and a sponge-cup and pen-rack, price $5. Send to the company, as above, for a catalogue.

External Use of Camphor in Gangrene.

Dr. SAFFORD translates, for the Chicago *Medical Examiner*, the following note:—

A. Netter, in Riemes, is of the opinion that hospital gangrene is a peculiar destruction of the subcutaneous and intermuscular, cellular and fat tissues.

The destroyed mass contains, therefore, much fat. The camphor unites with this at a low temperature, and forms a fluid substance, a camphor oil. This is discharged; and then comes to view the tissue capable of life.

Netter says if there are no anatomical lesions, aponeurosis, fascial and otherwise, neither inflammation, complicated with erysipelas, nor pyæmia, that camphor, early applied, and in large quanti ies, is a sure cure for hospital gangrene. He cites a large number of cases successfully treated in this way. Eight cases that were cured are fully described.

He also tried, with equally good results, camphor powder upon phagadenic chancres that had assumed a gangrenous form.

From his remarks we infer that the spread of hospital gangrene rests upon a ferment, whose life, camphor powder seems to cut short.

He tried in two cases the application of quinine and charcoal, but without the desired result.

He considers the disease a purely local one, and that the general *malaise* accompanying it is only in consequence of local disease, the re-absorption of putrid material. He considers the application of ferr. sesq. chlor. as dangerous, and recommends camphor-gum as the most effective remedy in his hands yet tried.

Sharp Practice in Vienna.

A Vienna correspondent of the Chicago *Medical Examiner* gives a warning about the private medical courses there, which we are sorry to see needed. Such tricks are disgraceful. He says:—

There are quite a number of private courses, conducted on the evident principle of first squeezing all the money possible out of their victims, and then giving them just as little instruction in return therefor as possible, with the idea, apparently, of thus obliging them to take another course in order to complete the unfinished subject; very much on the same principle that a gambler, after having played once and lost, must try again in order to recover his loss, and then having lost a second time, he cannot, of course, give up without one more effort to win it all back.

I might mention here a single case in illustration. A certain young professor, the son of one of the best known, leading members of the Vienna faculty, gives a private course of twelve lessons, one hour each, on auscultation and percussion, for which he charges the moderate sum of fifty guilders, or twenty-five dollars. One of his late victims, on venturing to mildly remonstrate with him on the rather meagre and unsatisfactory character of the instruction received, and the very sparse amount of material offered for practice and illustration, received the suggestive reply that in his next course he should take the class into another ward, where there was a much better supply of material, and that he should, therefore, be able to make it much more profitable and interesting. My friend *didn't bite*, however. Very few do, I think, a second time.

The Sulphovinate of Soda.

A Parisian pharmacist, M. S. LINVOUSIN, describes the preparation of this salt in the *Bulletin de Therapeutique*, for March 30th, and recommends it as a mild and efficient saline purgative, with a feeble and rather pleasant taste, free from any tendency to griping, leaving no consecutive constipation, and acting in relatively small doses (25

grammes for adults, 10 grammes for children). He considers it superior to any of the magnesian purgatives, as these, when much used, tend to produce vesical calculi of ammonio-magnesian phosphates. The salt may be also named the ethylsulphate of soda.

A New Surgical Treatment.

At a meeting of the Surgical Society of Ireland, Dr. F. KIRKPATRICK brought forward a communication on the treatment of certain surgical diseases by the alternate use of caustics and the knife. His method was to make a slight incision, then to touch the part gently and repeatedly with potassa cum calce; again to carry the knife a little deeper, and in turn to use the caustic. A somewhat similar plan had been adopted in a leading London Hospital some time ago, when the caustic used was chloride of zinc paste. Mr. KIRKPATRICK had experienced the good effects of the plan in cases of tumors, of caries of bone, and of acute osteitis, of contraction of cicatrices after burns, in removal of epithelioma, in fistula *in ano*, in scrofulous ulcerations and enlarged glands, in cases of furunculus and of deep-seated abscess. Sometimes the pain caused by the process was a serious drawback, and the patient required to be chloroformed.

CORRESPONDENCE.

On Sulphite of Soda in the Treatment of Small-pox.

EDS. MED. AND SURG. REPORTER:

Many of the diseases of man have their own appropriate remedies, and when such is not the case the treatment must be expectant. Before the outbreak of the present epidemic of small-pox, this fearful disease was treated entirely upon the expectant plan, and even yet this is the treatment in many instances. But the remedy found to be most effectual is the sulphite of soda. Small-pox evidently is a disease originating in the blood, and, as believed by many, a septic poison; and since the sulphites are so efficient in many other septic diseases, why should they not be capable of arresting this disease?

Reasoning in this way, and hearing that many others of the profession had similar views, some even having put the sulphite of soda to a successful trial, I determined, if possible, to give it an impartial trial. The first two cases under my care were two boys in the same family, aged respectively twelve and eighteen years, the oldest boy taking sick two days after the first. As soon as I had made a positive diagnosis, which was about the first day of the appearance of the eruption, I prescribed sulphite of soda in 8 grains for the younger and 10 gr. doses for the older, one every three hours, with pulv. ipecac. comp. at night. These cases were of the confluent form; they now progressed favorably, the eruption appeared, and passed through its several stages finely, no untoward symptom, with the exception of alarming epistaxis about the fifth or sixth day of the disease. By the way, this is a symptom of which the books say nothing, and which, in seven cases out of the twenty-six under my observation was alarming, in one instance carrying off my patient; it usually appears about the fifth day; never after the eruption is mature.

No other treatment was used for my two patients except a mild tonic or stimulant at the close of the disease. In some instances stimulants must be given throughout the entire course of the disease; the form preferred by us in this as well as in other diseases where stimulants are necessary, is spt. frumenti, in doses necessary to keep the system at par all the time.

In some cases a grain of crystallized carbolic acid added to the adult dose of the sulphite is very beneficial. The angina, in some cases so severe, was greatly benefited by a gargle of sulphite of soda and carbolic acid, one-half drachm of the former and five grains of the acid to the oz. of water. In cases where the eruption is tardy, the sulphite will bring it forth, will cut short the primary fever and thus prepare the patient to meet the most dangerous period, that of the secondary fever. It will keep up the secretions of the skin, kidneys and bowels; in few cases did I use any other medicine during the fever. When the fever was very high, potas. citras, given at short intervals and in doses of 10 or 15 grs., was very useful.

The sulphite, by keeping up the secretions, will prevent retrocession of the eruption. It will cut short the disease by at least one-third of the ordinary time under the old treatment; this is not just the experience of myself, but of many others. Of the twenty-six cases seen, twenty-three were treated; out of this number four died; two of these

utterly refused to take the sulphite on account of its disagreeable taste. Then out of twenty-one cases treated by the sulphite, two died, or a little less than one out of every ten. Most of these cases were severe from the start. The sulphite must be given in large doses; in two cases of a very malignant type the odor of the medicine was distinctly perceptible in the urine and perspiration; both, however, recovered. In all cases it acted like a charm, and I do not hesitate to say that, in the future, it will be the medicine relied on in this formidable disease. With such a weapon in our hands, let us not, therefore, fear to enter the fight.

D. A. HENGST, M. D.

Prospect, Pa., June 14, 1872.

Effects of Strychnia in Toxical Doses.

[The following accurate and remarkable description of the subjective sensations of a toxical dose of strychnia deserves preservation.—EDS. REPORTER.]

EDS. MED. AND SURG. REPORTER:

The causes that led me to commit the rash act of which I am about to give an account can be of no particular interest; and, omitting all allusion to motives, and making no attempt at excuse, I will simply state the circumstances of the case, that I think may be of interest to those engaged in the advancement of medical science.

I am induced to do this by the request of my friend and physician, Dr. E. H. COOVER, and the assurance that the case is a remarkable one, and likely to attract the attention of the medical profession everywhere.

On the morning of November 20th, 1871, at about eleven o'clock, I swallowed *nearly*, if not *quite*, one grain of strychnia, which had been in my possession since the 16th of that month. I was sitting on the side of the bed, in the second-story back room, in which apartment I have slept since I occupied the house. I took the powder dry from the paper, and held it in my mouth until it had become moistened with spittle, when I swallowed it; walked to the table and drank a glass of water; went into the room over the kitchen and hid the paper in which the poison had been, and then went down stairs, where I took a seat in a rocking-chair in front of the stove. In the course of five minutes I began to feel slight cramps in the calves of my legs. My wife was sitting by the table sewing, and I asked her for a couple of crackers, which she gave me. The cramps had by this time increased in intensity, and extended to the feet and thighs, causing the most intense pain. I asked if there was an egg about the house, and being answered in the affirmative, told my wife to break it and give it to me raw. She then suspected that I had taken something, and began questioning me closely about it. I expected soon to be in eternity, and thought that no human power could avail to save my life, so I told her what I had done. She immediately raised an alarm, and Mr. JOHN HOYER came in, followed by several other neighbors. The egg was given me, besides a large quantity of warm salt water and strong tea, and a messenger was sent for Dr. COOVER.

About the time I called for the egg I attempted to rise from the chair, but fell to the floor with convulsions in the lower extremities, which became violent on the least attempt to move, and the feet were drawn in toward each other, becoming stiff and immovable save as the occasional convulsions shook them. Unsuccessful attempts were made to bathe them in hot water, each effort to raise me bringing on a violent paroxysm, in the last one of which I thought my jaws had become unhinged. I was now perfectly paralyzed from the hips down, and suffering the most exquisite pains, which began to extend upward, the muscles of the shoulders and neck soon being considerably convulsed, the forearms still being free from pain.

I now bade my wife "good-by," and prepared for the final struggle, which I knew must be near at hand, as I now had become rigid from the neck down (save the forearms); the convulsions of the muscles were becoming fearful, and the torture awful to endure. And now came on a tremendous convulsion. My hands were drawn in to my sides, with the fingers drawn apart and slightly bowed, and the jaws became rigid. I felt myself raised as if by some mighty power, and fixed immovably, with only my feet and head touching anything. I heard some one say, "It is all over with him," and felt something like a black pall settling down upon my brain, when I became unconscious of everything except my own agony, which was now beyond all description. I could feel my heart fluttering like a wounded bird, and my brain beating and throbbing with an irregular motion, as though at every beat it would burst from its confinement. Every joint was locked, and

every drop of blood seemed stagnated. I remember thinking that it could not last long thus, when I must have lost consciousness.

I remember nothing more until I felt a sensation of relief, as though the garments of Death which had been drawn over me were being now drawn back. Those terrible cramps seemed to be descending toward my lower limbs; a sweet feeling of relief stole over me, and I began to be again conscious. Turning my head, of which I now had command, I saw Dr. COOVER kneeling by my side, pouring medicine into my mouth from a spoon, and spoke to him, adding, "Here is the man that can save me," or words to that effect.

I was now free from cramps as far as the hips, and was fully conscious of all that was going on. I could feel the cramps receding before the antidote, and leaving the limbs free from pain until after the second dose administered by the Doctor, from the time I resumed consciousness, when I was entirely free from cramp, with the exception of a little in the feet. I was then moved into an adjoining room, and placed upon a pallet, feeling comparatively comfortable. I had but one attack of cramps afterward, which was immediately relieved by a dose administered by my wife, the Doctor having left for a short time; and when he returned I felt that the poison was completely neutralized.

I have since felt no return of cramps or convulsions; have had a good appetite, and could be out of bed were it not for the soreness in the muscles caused by the intense pain to which they were subjected.

(Signed) ——.

Harrisburg, Pa.

NEWS AND MISCELLANY.

Glycerine as a Preservative.

THE use of glycerine as a preservative of anatomical objects, or specimens of natural history, has been strongly recommended; but it appears from experiments that it has an unfavorable action upon certain tissues. Thus, teeth kept for some time in glycerine lose their original hardness, and can be cut with a knife like horn, and oxalate of lime crystals appear to be completely broken up. These hints will be of importance to those who are in the habit of making wet preparations with this substance.

Isinglass Manufacture.

GLOUCESTER, Mass., is gaining much from the value attached to hake and cod sounds, which are used in the manufacture of isinglass. They are worth $120 a barrel. Some of the fishermen carry out boys expressly to cut out the sound, and they make a very profitable business of it. On board a vessel which arrived recently, a lad made $60 as his share, double the amount shared by the crew. Hake sounds are the most valuable, and obtain the highest price. It is only recently that cod sounds have been used, as they are far less glutinous than the hake. A new isinglass factory has recently been started at Rockport, hence the extra demand for this article.

Sanitary Inspector, New York.

Dr. Moreau Morris, City Sanitary Inspector of the Health Department of New York, has tendered his resignation to the Board, which was accepted, to take effect on the 1st of July. Dr. Morris has occupied the position since the reorganization of the Health Department, in May, 1870.

Dr. Elisha Harris, formerly Sanitary Superintendent of the Metropolitan Board of Health, and Dr. Charles P. Russell, the present Register of Vital Statistics of the Health Department, are candidates for the position.

IN Ottawa county, Kansas, recently, a child, two years old, died from being bitten by a rattlesnake. The head of the snake, with three or four inches of the body, had been severed with an axe, and was supposed to be lifeless, and the child happened to stop near the severed head, and was bitten, and died in about four hours.

THE people of Groveton, N. H., are suffering badly from measles. One of the schools has been closed, owing to the teacher and nearly all the pupils being prostrated by the disease, and other schools are largely reduced in numbers.

A FOREIGN vegetarian, who came to this country with the intention of introducing unbolted flour, has given it up as impracticable, because, as he asserts, the Americans give such little time to their meals that they bolt everything they eat.

Dr. S. M. INGERSOLL, who lived on the site of Columbus, Ga., before it was thought of for a city, has lately died. He claimed to have given Prof. Morse the primary idea that led to his wonderful invention.

YELLOW FEVER and small-pox prevail at Montevideo, and "an epidemic of some kind" has killed 8000 out of 13,000 inhabitants of three Brazilian towns.

—The native race of the Sandwich Islands is rapidly dying out. In 1870 and 1871, 7321 native Hawaiians died, while the births were only 4972.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

SPECTRUM ANALYSIS.

By Charles K. Mills, M. D.

Read before the Northern Medical Association of Philadelphia, April 26, 1872.

(*Concluded from No.* 802.)

To simply "freshen the edges" of memory I will here refer to a few well known physiological facts. Every tyro has knowledge of the change of the blood, during its passage through the lungs, from the dark purple to the scarlet tint. This change is also noted when venous blood is acted on by air, or, better still, by oxygen. Water darkens arterial blood; and strong solutions of common salt, saltpetre, and bicarbonate of potassa, brighten venous blood. According to Stokes, this difference is due to a change in the refracting power of the corpuscles, in their shrunken and in their distended condition. Examined by the microscope, blood, it is well known, consists of red and white corpuscles, and liquor sanguinis or plasma. From an analysis of venous blood by Lecanu, in one thousand parts, one half or five hundred parts are corpuscles, of which corpuscles, one hundred and fifty-six parts are solid. Of these one hundred and fifty-six parts of solid, hæmatin, or the red coloring substance, embraces about eight and a half parts.

Hoppe-Seyler found that when dilute solutions of blood were examined by the spectroscope, there appeared a brilliant spectrum, crossed by two peculiar *dark* bands, with a remarkably bright *intermediate streak*, situated in the yellow and commencement of the green, between the D and E lines of Frauenhofer. He showed that this spectrum was formed by the colored blood of animals generally. The alkaline carbonates and caustic ammonia, added to the blood solution, did not alter the red coloring substance, for the spectrum remained unchanged. When, however, acids were used, it seemed to be instantly decomposed; and the same effect took place, but more slowly, from the action of caustic alkalies; in both of these cases a substance being produced which caused different absorption bands, and corresponded with the hæmatin of Lecanu.

Let us follow Stokes in his experiments on the same subject. He placed his dilute solution of blood in a test tube. I might here digress a moment to remark that Stokes recommends carefully selected test glasses, instead of the small glass vessels with parallel sides. Browning, we are told, manufactures such glass tubes, and vessels of every required size and shape, especially in the form of a wedge, so as to test easily the same liquid at different successive thicknesses. He also furnishes, enclosed in glass tubes, a whole series of liquids, the absorptive power of which is either remarkably great, or else manifested in a peculiar way. A good way to use the test tube is to fill it with the liquid to be examined, and then place it close in front of the slit by means of a supporting ring attached to the end of the spectroscope; then direct the instrument, with the slit not too contracted, toward a luminous cloud, or bright light immediately in front.

Stokes easily discovered the two charac-

teristic dark bands, with the intermediate bright stripe. He added to the dilute solution of blood a reagent capable of abstracting oxygen. The reagent selected was a solution of the protosulphate of iron, containing a small quantity of tartaric acid, which prevents the precipitation of iron by alkalies; this was rendered slightly alkaline by a little soda. On making the addition, the spectrum at once changed. It first became a little darker; and a *single*, broader, and less defined band was now seen, situated nearly opposite the place of the bright band in the spectrum of the simple solution. The two characteristic dark absorption bands, with the intermediate bright streak, disappeared altogether. He next exposed the deoxygenated and changed colored solution to the air, when the spectrum with the three characteristic bands disappeared, the blood again becoming brighter.

Stokes has concluded from his experiments that there exists in the blood a *natural coloring matter*, called cruerin, hæmatocrystalline, or hæmato-globine, which can exist in two states of oxidation, in which its color and its action on the spectrum are different. In its bright condition it is named *scarlet*, and in its dark, *purple* cruerin, the former giving the spectrum with two dark bands and the intermediate light one; the latter affording the spectrum with a single dark band. The purple cruerin, or deoxygenated kind, is supposed to exist in venous blood; the other in arterial blood. Lecanu's hæmatin is an artificial compound produced by the decomposition of the natural coloring matter by powerful acids.

This cruerin, hæmato-crystalline, or hæmato-globine, is a wonderful substance. It has a strong affinity for oxygen. It holds the same relations to oxygen that the blood as a whole does. Red blood corpuscles have been called the *carriers* of oxygen, and they have this property because the natural coloring matter which they contain has such a special attraction for oxygen.

Hæmato-crystalline shows the same optic relations as blood. It is a crystallizable substance; the most indestructible known. It has the highest known atomic weight. Vitality is supposed to be directly dependent upon its amount in the blood. By the spectroscope the quantity and quality of this substance can be detected, and the vital force of an individual thus measured with scientific accuracy. This instrument will again bring transfusion into fashion; for, hæmato-crystalline is the vitalizing principle, it follows that when vitality is at a low ebb the transfusion of healthy blood containing this substance will be beneficial. Instead of transfusing blood, hæmato-crystalline may be given internally. It can be imported from Europe, but I have obtained two receipts for its manufacture from Dr. Waterman, of New York, who published an interesting article on Spectral Analysis, in the *Medical Record*, from which some material for the present essay has been derived. In connection with Dr. Charles Carter, of the Northern Dispensary, I propose making a series of therapeutical experiments with this substance.

In toxicology and medical jurisprudence spectrum analysis is justly taking a high position. Metallic poisons and vegetable poisons, and their alkaloids, tinctures and solutions of narcotic poisons, etc., yield their secrets to the spectrum test. In cases of poisoning from barium and thellium the spectroscope affords a peculiarly easy and reliable test for demonstrating the presence of these substances.

Roscoe, as a highly interesting point, refers to the fact that the blood, when it contains very small quantities of carbonic acid gas in solution, exhibits a very peculiar set of bands; and the poisoning by carbonic oxide—for, as is well known, the poison of burning charcoal is due to this carbonic oxide—can be readily detected by the peculiar bands which the blood containing carbonic oxide in solution exhibits; and hence we have these absorption lines coming out as a most valuable aid in toxicological research.

The detection of blood stains in criminal inquiries is a most important use of the micro-spectroscope. When the blood has been acted upon by various chemical agents the microscope fails to determine its presence; but the crystallizable substance of the blood retains its integrity so long that it can always be demonstrated spectroscopically. The exact position of the dark absorption bands in blood spectra is different from those formed by solutions of different substances resembling blood. In pursuance of this subject, Sorby studied the absorption bands given by a dilute solution of perchloride of iron, to which a little sulphocyanide of potassium had been added, and solution of cochineal, into which ammoni

had been introduced, a solution of cudbear in dilute alcohol, the gravy of wasted meats, etc.

Schellen, when speaking of the absorption phenomena of blood and other colored liquids, generalizes as follows:—"In many cases small changes produced in these coloring matters by dilution, by chemical action, or by the increase or diminution of the thickness of the stratum of liquid, are accompanied by changes in the absorption bands, so that a conclusion may be formed, from the position, width, and intensity of these dark bands, as to the nature of the coloring matter, and the circumstances by which it has suffered alteration. The two dark blood bands are seen in the yellow-green of a spectrum formed by either daylight or lamplight from water infused with but a trace of blood, and which exhibits to the naked eye scarcely a perceptible tinge of yellow. On this account, spectrum analysis has been called into the service of physiology and pathology, and is fitted to render valuable aid in medico-legal investigations, since it is not improbable that the spectroscope, when in connection with the microscope, will be able to detect the presence of blood or poison in many cases where the microscope alone can furnish no results, or only those of an untrustworthy character."

In speaking of the extraordinary delicacy of the spectrum test, I referred to the extremely minute quantities of sodium, lithium, etc., which could be detected in this manner. Sodium, potassium, lithium, cæsium, rubidium, and calcium, are metals which have been spectroscopically demonstrated in the human body. Dr. Bence Jones has used the spectroscope to follow the entrance and exit of some of these substances into the blood and tissues of living animals. Dr. Jones has also made spectroscopic researches, in which the *fluorescent* property of quinine is employed to follow that article into and out of the economy by its presence or absence in the crystalline lens of the eye. He has also shown that a peculiar fluorescent animal substance, named by him *quinoidin*, is constantly present in the animal body.

Urine and fæces have been subjected, with satisfactory results, to spectroscopic scrutiny; and there is no good reason why human milk, sputa, vomited matters, perspiration, and other secretions and exudations may not be, if they have not been already, examined in the same manner. Hæmatine has been discovered in the urine in intermittent hæmaturia. Dr. S. Waterman says: "The presence of hæmato-crystalline or hæmatine in the urine is, of course, easily detected. In diseases where an extensive destruction of blood corpuscles takes place, I have repeatedly discovered a beautiful band near F, at the commencement of the blue part of the spectrum. When this band becomes visible in the urine it indicates gravity of disease, and is a landmark to the practitioner, informing him that the vital powers of the patient are fast breaking up and passing away."

The urine and rice-water dejections of cholera have been investigated by spectrum analysis, and, it is said, give absorption bands of diagnostic value. The spectroscope has also thrown new light upon the shadowy Bright's Disease. By means of it, Dr. Thudichum has detected two new decomposition products, omicholine and omicholic acid, which probably cause the uncontrollable irritation of the stomach often present in chronic renal disorder. In the examination of bile in disease, spectrum analysis affords more reliable and valuable information than the famous test of Pettenkofer. The presence of the biliary acids in evacuations is easily demonstrated by their peculiar absorption bands.

In botany, and in botany applied to medicine, the spectrum test is of great value. If a solution in ether of chlorophyll—the green coloring matter of leaves—be submitted to the spectroscope, dark bands appear in the red, as well as in the yellow, green, and violet portions, and the blue shades give place to a faint red hue. This solution does not, therefore, absorb the whole of the red and yellow rays, but only those which possess a peculiar refrangibility or wave-length; it exerts the same influence on most of the blue and violet rays, while it transmits unchanged all the other colors of the white light.—(*Schellen.*) In the *Microscopical Journal of the Royal Microscopical Society*, July, 1870, a new spectroscopic test for albumen, botanical in its origin, is mentioned. A blue fluid, called phycocyan or the "dichloic fluid," obtained from certain algæ, ordinarily gives one absorption band; but when albumen is added to it it affords two; hence when it is mixed with urine containing albumen, the second band makes its appearance.

In ophthalmology, spectrum analysis has already been employed, and is doubtless destined to play a prominent part. I learn from the *Transactions of the American Ophthalmological Society* for 1871, that Dr. Lamansky, in a series of experiments, has shown that our eyes are more sensitive to green, yellow, and blue, and less sensitive to violet, orange, and red, than to white light, so that, by experiments with color sensations, the brightness of white is not exactly unity for the other colors to be compared with, as Aubert held in his experiments. * * The spectroscope has been used to detect states of color-blindness, and other abnormal conditions of the retina. It has also been employed to determine the capacity of colored glasses for spectacles suitable to individual cases. This instrument will, probably, in the end, clear up altogether the physiological phenomenon of color-blindness in eyes apparently healthy.

Before concluding, I will dwell for a few moments on the absorption of light by colored gases, a topic which has, at least, a medico-chemical interest. These gases, when prismatically analyzed, show only narrow dark bands, which, like black lines, often cross every color in the continuous spectrum. "For the exhibition of these absorption phenomena a glass globe is employed, smoothly polished inside, and capable of being closed at both ends by pieces of plate glass. The vapors for examination are introduced into the globe by a side opening; but if it be desirable that they should be formed during the investigation, the substances needed for their development can be placed in the vessel by removing the cover, and vaporized by a careful application of heat. The globe must be placed immediately before the prism, or close in front of the slit of the spectroscope, and in such a position in the path of the rays that they may pass through the inside of the sphere perpendicularly to the glass plates covering it." The vapors of nitrous acid, iodine, bromine, hydrochloric acid, perchloride of manganese, etc., have been examined in this way. In the case of nitrous acid the spectrum appears crossed by a row of dark bands, the violet end having disappeared. "By increasing the heat of the vapor these bands gradually become stronger, while new dark bands successively appear, until at last, when the temperature has reached a certain limit, all the colored portions of the spectrum are absorbed, and not a ray of the electric light is able any longer to penetrate the vapor. Brewster carried the process so far, by a constant increase of temperature, as to render the gas entirely opaque, even to the power of the sun's rays." * * Some vapors, as those of sulphur and selenium, although colored, do not produce any absorption bands in the spectrum.

I have thus endeavored to give a general idea of spectrum analysis, and more particularly of its relations to medicine. What I have touched upon in this essay is but a small fraction of that which has been achieved by the spectroscope. It is revolutionizing some of the sciences hitherto deemed most stable. Its actual and potential accomplishments are as manifold as the devices upon the shield of Achilles. Spectrum analysis has not only made "light into a ladder, on which the human mind can rise billions and billions of miles," but it is also giving to man the power so to use and direct this light as to illuminate with it the darkest recesses of biology. I doubt not that among the grand deeds of the future spectroscopic discoveries will stand proudly pre-eminent, like superior peaks in a lofty mountain range.

HIP-JOINT DISEASE.

By T. Curtis Smith, M. D.,

Of Middleport, Ohio.

This disease, though the same in character as that which frequently affects other joints, is one of peculiar and serious interest and great importance. So much is this the case that few if any standard authorities of the present day can be found that do not treat of it separately, by chapter or other division, from the same disease affecting other joints of the body and extremities. This joint is the most deeply seated, attaches the largest extremity to the body, by enarthrodial articulation, and is so abundantly covered in by soft tissues and protected by the trochanter major, that at no point can we place our fingers over or upon the synovial investment. The same is hardly true of any other joint.

For this reason early or minute changes cannot be detected; to obtain fluctuation while the capsule is entire is impossible; and the morbid process may go on for some time before any abnormal conformation is discoverable; and frequently the complain-

ing of the patient would lead one not well informed in this disease to suppose that the malady was located elsewhere.

"The difficulty, or rather impossibility of fixing the pelvis with the hand, the projection of the trochanter, and the bend of the neck of the femur, rendering the true radius of motion very short, the mode in which the whole head of the bone is impacted in the socket, and many other circumstances, throw great obstacles in the way of a diagnosis concerning merely the presence or absence of hip-joint disease; and a minute distinction between the inflammation of one structure and that of another is extremely difficult, in very many cases impossible."*

The disease may begin in the acetabulum, the head of the femur, the ligamentum teres, capsular ligament, or the synovial membrane. Hence it may be divided into "arthritic, femoral, and acetabular." This division is not merely nominal, but of practical importance with reference to some points in the surgical management of the disease. The distinguishing pathological complexions of this disease are manifested by the gait, pain, attitudes, suppuration, sinuses, dislocation, and anchylosis. Among the first indications of the disease, especially where it comes on slowly, is a peculiar limping *gait*, in which the diseased hip is somewhat depressed, and a consequent curving of the vertebral column to accommodate the position of the pelvis. In the morning this may be scarcely noticeable in the very early commencement, but it is more marked towards evening and later in the disease. The subject will be seen limping, and with the diseased side a little behind the sound one, or, in other words, dragging more or less the limb of the diseased side; the thigh is partially flexed toward the abdomen, the foot usually turning outward, though sometimes inward, both while walking and standing, and in the latter attitude the weight of the body will be seen resting on the sound side, with the weight *only* of the diseased limb resting on the toes. The gait has been described as limping, or a kind of shuffling or hopping. This may continue for weeks, or even months, and frequently does so without attracting serious attention, either of the child or parents, but should always constitute sufficient ground for grave apprehensions on the part of the surgeon.

Later, the pain in coxalgia is variously located, and is seldom at first referred to the hip-joint itself, except in the arthritic variety. When it *is* located in that joint, it is very intense, and greatly increased upon any movement of the joint, however slight. When the acetabulum is the seat of the disease the pain is more apt to be referred to the iliac region at first, and later, in the joint, when it becomes deep seated, gnawing or grinding, severe, and fearfully increased by every motion of the limb, or by pressing together the articular surfaces. When the disease attacks the head of the femur the pain is usually referred to the knee, or the outer face of the thigh; but if the patient be directed to exactly locate the painful point, he may not be able to do so.

In all varieties of the disease the pain may be referred to the knee, or at least a pain at this point in a child, with the gait above described, should lead us to suspect the hip, which should be carefully examined by proper manipulations. In one case that came under my observation the pain was located in the lumbar and sacral regions, so markedly that two physicians that had treated the case at different times had treated the child for "spinal disease," and continued to do so until late in the second stage, at which time I saw it. The cause of the different locations of the pain has not, so far as I know, been satisfactorily explained, but has generally been attributed to irritation of the nerves that pass in close proximity to the joint. That in the knee has been referred to irritation of those branches of the obturator nerve that supply the hip-joint; also to an obscure sympathy supposed to exist between the two ends of the bone. Many theories have been advanced to account for the different locations of the pain, which are unsatisfactory, and teach us but little. The word sympathy comes quite as near as any one to covering the ground, but that is only a word which serves to cover up our ignorance of the real cause of its affecting this or that point, as the case may be.

The attitude of the limb and of the patient is peculiar; many of the points of this feature were given above whilst describing the gait; but the attitude varies with the different stages. Early in the progress the limb is usually abducted. This is caused by

* Barwell on Diseases of Joints, p. 296.

the partial contraction of the muscles on the anterior and outer aspect of the joint, the contraction being produced by local irritation of the nerves. At this time the knees will stand widely separated; but later abduction will take place, when the knees will be brought close together, or the knee of the diseased side in contact with the inner face of the thigh above the knee of the sound limb, at which time the former will be carried in advance of the latter, and if the patient stand up, which he can only do by resting on support, the thigh will be partially flexed on the abdomen, and to compensate this, the spine at the lumbar region will be curved forward, thus causing the patient to seem to stand nearer straight than he really does.

There is also at first, apparent elongation of the limb, but careful observation will soon establish the fact that this lengthening is not real, but is caused by a lowering of the diseased side of the pelvis. On the contrary, where elongation seems to be present, careful measurement will in many instances show some shortening. It has been supposed that effusion into the joint will cause elongation, but to my mind this seems impossible, as the ligaments of the joint hold the head of the femur in firm proximity to the acetabulum, and no amount of effusion could be likely to lengthen them, and thus cause the supposed elongation. On the contrary, I can conceive how the head may be more firmly held in position by the large effusion of fluid into the joint, viz., by pressing the unyielding capsule outwards, like a bag being distended with air or water, and in proportion as this is pressed out, is the head caused to press more firmly into the acetabulum. This, I think, would also in part account for the gnawing or grinding pain so constantly present during the second stage.

In the third stage, *real* shortening occurs from disintegration of the head of the femur or acetabular cup, and may, though rarely, occur from dislocation. The great apparent shortening is caused by elevation of the diseased side, which is often so great as to have led to the supposition that dislocation had occurred, when, in reality, this was not the case.

Suppuration quite invariably occurs unless the disease is detected and well treated during the first stage. In the scrofulous subject it is liable to run on to suppuration, even if well and early treated. When the head of the femur or the osseous surface of the acetabulum is the seat of the trouble, suppuration almost invariably takes place, but in the arthritic variety pus is scarcely more liable to be formed than when the same kind of inflammation attacks other joints, and we know that we frequently see it run its course in other articulations without aboutissement. It never occurs during the first stage, nor till the latter part of the second stage. The point of exit for the pus is of interest in a diagnostic point of view, and will be considered under *Sinuses*.* "An attentive examination of the position and direction of these is of great importance in forming an opinion as to the seat of the osseous disease.

"There are three *situations* in which sinuses are met with, which vary according to their points of origin from the abscess, and the position of the diseased bone: hence it is of importance to note their site and direction. 1. When the sinus opens two or three inches below and a little in front of the great trochanter, about the insertion of the tensor vaginæ femoris muscle, the disease is almost invariably *femoral* in its origin. 2. When the sinus is in the gluteal region it may indicate femoral, but not unfrequently is dependent on *pelvic* disease; the acetabulum or a portion of the dorsum ilii being the part involved. 3. The sinus may open in the pubic region, either above or below Poupart's ligament. A sinus in this situation is almost certainly diagnostic of disease of the pelvic bones, especially the pubic aspect of the acetabulum. When it appears *above* the ligament it probably leads to intra-pelvic abscess. On the other hand, when the abscess opens below Poupart's ligament there is generally disease of the rami of the pubes or ischium."

It will thus be seen that the location of the sinuses will be of greater diagnostic value than would *a priori* be supposed, as by them almost the exact point of the origin of the disease can be told with tolerable accuracy. Attention to these points is of all the more value when we remember that the probe often fails to reveal the diseased point and its extent. The sinus is often so tortuous that a probe cannot be made to follow it, or if the probe does follow the sinus, a portion of healthy bone, a bit of loose cartilage, or plastic material that has been

* Erichsen's last Ed. by Ashhurst.

thrown out during the process, may intervene between the end of the probe and the diseased osseous tissue. When the disease is indicated as being femoral, we may quite invariably know it to be carious in its nature, but when the acetabulum is indicated, we may judge with equal certainty that it is necrosis, the latter being the form of morbid action that attacks the pelvic bones, while the former is that which usually attacks the head of the femur.

Dislocation. This is a vexed question. Does dislocation frequently occur, or does it not? It is my opinion, which may go for what it is worth, that dislocation does not frequently attend this disease, the statement of many authorities to the contrary notwithstanding. The great amount of shortening present in the third stage has led many into the error of supposing that dislocation has occurred; but this shortening, which is from one to three inches, or even three and a half, is caused by the elevation of the diseased half of the pelvis, and waste of osseous tissue at the head and neck of the femur. The neck of the latter stands very oblique in young subjects, and this, with the head worn off, would alone shorten the limb probably an inch at least, to which add one to two and a half inches for elevation of the affected side of the pelvis, and you have accounted for all the shortening that usually attains. Nor is the pelvic elevation more than can easily be effected by slightly curving the spine. We will suppose there is a shortening of three inches; that will bring the heel at least opposite the internal malleolus of the sound limb, or above it, in a young subject. Now if to this we add enough, or as much more as dislocation upon the dorsum ilii would cause, we may add at least two inches, and this would bring the heel to near the middle of the calf of the sound limb, or, at least, up to the junction of the middle and lower third. Hence, to have dislocation after the head and neck of the femur has been worn off, and dislocation seldom occurs before that time, we must have, at least, four inches of shortening, and will be more likely to have five or six.

Another cause* for shortening without dislocation is found in the fact that the action of the muscles upon the hip during the course of coxalgia is such as to keep the head of the bone constantly pressing hard against the upper lip and surface of the acetabular cup; and this constant pressure and friction, the latter caused by frequent spasmodic contractions of the muscles, causes the diseased action to be more prominently seated at this point, and to wear or grind its way into or through the acetabular lip, and into the cancelous structure of the bone above it. One inch of shortening may occur in this way. The head of the femur is held against the yielding surface firmly by the pyriform-obdurator and other muscles that are so immediately related to the capsule, while the burrowing upward, or upward pressure, is caused by the organic and spasmodic contraction of the adductors. Barwell states, "that such evident yielding to the pressure upwards is not an exceptional case, but is the rule; that when we find a hip-joint ulcerating in any other way and position, it is that some rare circumstance has caused a primary osteitis in that particular spot."

Barwell (p. 317) further states that "*Dislocation* of the head of the bone from disease, or spontaneous dislocation, as it is called, is an occurrence so unusual that one is astonished at the general credence in its frequency. Only a few years ago, all cases of this disease were supposed to end in this way. (Loc. cit.) But if a search be made in the College of Surgeons, St. Thomas, St. Bartholomew's, or other of our great pathological museums, there will be found but very few specimens exhibiting simultaneously the signs of morbus coxarius and of dislocation. On the other hand it is by no means uncommon to find the head and neck of the femur shriveled to little more than a button-like projection, the acetabulum quite altered in form and place, and yet the bone retained in its cavity."

Liston, Bauer, March and Gross assume the same ground. The latter states that* "A true luxation, such as occurs in the normal state of the parts from injury is, in fact, impossible, from the very nature of the morbid alterations in the superior extremity of the bone." These authorities claim that luxation may, but rarely does, take place, and that it only does so where there is the most extensive softening and destruction of the soft tissues enveloping the joint.

On the other hand, Brodie, Cooper, Partridge, Furguson, Dewit, Erichsen and

* For illustration of this fact see Barwell on Diseases of Joints, page 313.

* Gross' Surg. 3d ed., 1 vol., p. 1027.

many others claim that dislocation is of frequent occurrence. The latter says: (p. 768, last ed.) "In the advanced forms of hip-disease, dislocation of the head of the thigh bone *commonly* (italics mine) occurs." I think, however, there is sufficient reason given above to doubt the frequent occurrence of dislocation and that the mistake has occurred in consequence of the fact that sufficient notice has not been taken of the lateral elevation of the pelvis on the diseased side, and of the grinding off of the head and cervix of the femur, as well as its burrowing or ploughing its way through the superior lip of the cotyloid rim.

Anchylosis. When recovery occurs without excision of the head of the femur, anchylosis nearly always takes place. This may be effected either with or without the formation of pus. It is far better for the subject to have it take place before suppuration becomes established. There is nearly always more or less deformity when anchylosis is effected, not only at the hip. but of the spine. The joint may become fixed at any angle with the body, and that, too, in the best of hands. Thus, one may take place with the limb abducted greatly, while another may be adducted; a third with the thigh flexed immovably toward the pelvis, at a greater or less angle with the body. These deformities are very well shown by cuts of cases that had recovered from this disease with fixed hip-joints, in the Children's Hospital at Philadelphia, under the care of Dr. H. Lenox Hodge. I have heard it charged that such deformity was the result of neglect and malpractice on the part of the surgeon. To say the least of such an expression, it shows a very great, almost unpardonable degree of ignorance, in reference to the nature, management and results of cases of this class.

The *Pathology* of this disease is about the same in general character as the same disease affecting other joints. The morbid changes will be found to vary according to the tissue first attacked, *i. e.*, whether hard or soft. In the synovitic variety there will be, early in the course, an abnormal degree of vascularity and some opacity and thickening of the membrane affected, attended also with an increased secretion. Plastic matter will soon make its appearance, and will be either attached to some portion of the inflamed surface or floating in the synovia, which, by this time, has become more than normally thick, and turbid to some degree. Later, there is a greater quantity of lymph thrown out, and the membrane becomes more intensely injected, and the fluid of a dirty or glue-like color. If it pass beyond this point, pus is formed and degeneration of the ligaments and cartilages occurs, after which the bone is sooner or later attacked with caries or necrosis, most likely the former.

If the subject be highly strumous, the synovial membrane or inner surface of the capsule passes through changes similar to those above, but the process is more nearly similar to that of granular inflammation, and these surfaces are found studded with granulations over the entire portion of the diseased surface. After pus is once formed, the case naturally runs on to abscess at or near the joint, and fistulous openings are established. The tissues around the joint become more than normally vascular, and thickened or indurated. When the head of the former becomes involved, or is the first point of abnormal departure, "the cancellated structure" becomes "abnormally vascular, light, porous, humid, and at the same time easily broken or cut." The cells are found filled with tubercular matter, or it may be found in small masses through the cancelli, either partially solid, or of a caseous consistence.

After this stage is reached all the usual pathological changes connected with caries of the bone will be present, and the destruction will go on more or less rapidly, until the entire head and neck of the bone is destroyed, or the death of the subject ends the process. True, in hip-joint disease, after this stage is reached, recovery may take place through anchylosis, but more frequently dissolution occurs, unless the surgeon interferes. If death does occur, the joint will be found fearfully disorganized; if recovery takes place it is by the process of establishing healthy bony granulation, and osseous union occurs.

In fatal cases there is nearly always found abundant evidence of visceral involvement, especially in markedly strumous subjects. These visceral mutations are the direct result of the establishment of the tubercular diathesis, during the long exhausting course of the disease, or this cachexy may have been constitutionally present, and have been more rapidly developed while the joint disease was passing through its ravaging morbid process. On this account, tubercles may

be found located in any organ or place where they are ever found in true tuberculosis. I think, however, that this visceral involvement and tubercular diathesis may become developed, in many of these cases, during the long debilitating course of the trouble, where no primary or constitutional taint originally existed, *i. e.*, in cases of synovitic coxalgia, that, from bad management or otherwise, go on through the stages above described. It may have begun in an apparently healthy child, have been the result of a rheumatic diathesis, or excited by accident or cold. It nevertheless is attended with the same or very similar local and constitutional results, and the end is much, if not precisely, the same in a pathological point of view.

Arthritic Coxalgia commences in some one of the soft structures immediately surrounding the joint, viz., in the synovial membrane, the cartilage, the ligaments, or the capsule. When this is acute, and runs a rapid course, the suffering is most intense, and the slightest motion or jarring will call forth pitiful expressions of pain, which is of the severest character. It is probable that this form more frequently attacks the synovial membrane or capsule than either of the other two structures named. These, however, are only the primary seats of the disease, for sooner or later its effects extend to the osseous tissue, unless checked either by nature or treatment during the first stage. In this first stage, there is an unusual amount of synovia secreted, which greatly distends the capsule, thus pressing upon the nerves immediately surrounding it; and this, with the inflamed surfaces and tissues within the capsule, gives rise to the pain. The pain, though nearly continuous in some degree, is nevertheless spasmodic, *i. e.*, after a few moments or hours of comparative ease, the most agonizing pain will suddenly attack the joint, which will again subside for a time, to be again followed by successive ease and intense suffering.

The synovia may be so freely secreted as to burst the capsule. If this occurs, a period of comparative relief follows, and the intense suffering will not again be as great, unless the disease go on to the formation of pus and abscess, when, if possible, it is even more severe than during the former stages. It is said that true lengthening in this form of coxalgia really takes place. This statement I am much inclined to doubt, for reasons before mentioned, though the statement comes from the best of authorities, and those who have lately written on the subject. If the capsule does give way, in consequence of pressure from the excessive secretion of fluid, the chances of early recovery are not so good as where this does not attain. Again, if the rent is large, and the disorganization of the ligaments and cartilages within the capsule be great, luxation of the head of the bone may possibly take place. Where this form takes a favorable turn the recovery is more or less complete. The probabilities are that the joint will be more or less stiff, or even perfectly so; but in one case that came under my observation, in which the attack was, though slow in developing, intensely severe, and continued for several weeks, the patient was eight months undergoing recovery, which finally so completely took place as to leave but a very slight degree of stiffness and a slight sense of weakness in the joint on attempting to raise heavy loads.

If the disease run on to suppuration, all the pathological changes and evil results attain that occur in the worst forms of hip-joint disease.

In *Acetabular Coxalgia* the disease has for its primary seat of attack some point of the cotyloid cup, which at first is more apt to be necrotic; and especially is this so if it involve either of the rami. But it is not unfrequently carious in its nature. The symptoms of this are so similar to those of femoral that both will be described together. However, in this form there is apt to be a difference in the location of the sinuses* from that of femoral or synovitic, and the pain is more apt to be located in or immediately around the hip.

Femoral Coxalgia commences in the upper epiphysis, and is more apt to attack young subjects, while the acetabular form is more apt to attack youths or adults. This variety is more difficult to treat successfully than either of the others. It is also more liable to bring about a fatal issue, through visceral involvement, or from exhaustion through suppuration, which is always long continued and profuse. In fact, this is the form which is considered strictly tubercular, and to have its origin in that diathesis. Whether this is strictly true I somewhat doubt, for I think some cases of this kind have been excited in strumous subjects by

* See paragraph on Sinuses, *ante*.

injury, cold, etc.; and I am well satisfied that both of the other varieties are more frequently excited primarily by some exterior cause, as injury to the hip-joint, too great or too long continued exertion, cold, etc.

(To be Continued.)

AN ANOMALOUS CASE OF CARCINOMA.

REPORTED BY ABNER ANDREWS,
Of Westerville, Ohio.

(Read before the Ohio State Medical Society, June 12, 1872.)

T. L., male, aged 46. Temperament, nervous sanguine; for several years had not been in vigorous health. History of the case previous to medical attendance: October 1st, noticeable indisposition. There were pallor of the countenance, variable appetite, constipation of the bowels, coldness of the extremities, pulse accelerated. February, 1872, experienced pain and lameness in the left hip and limb; pain at times acute, and extending to the knee. There were swellings and hardness of the muscles about the hip, which for a time seemed to increase. At this time there was an inability to walk without the use of a cane.

March 25th, 1872, was first called to see the patient. *Abnormal manifestations:* general debility; loss of appetite; constipation of the bowels; urine high colored, and containing a large amount of sediment; tongue coated with yellowish fur; pulse feeble, and ranging from eighty to one hundred; extremities cold; restless at night. There was experienced at this time pain in the right hip, extending down the limb, with swelling and hardness of the muscles. The sharp pain in the left limb had subsided. Soreness in the hips so great that there was an inability to lie upon either side, patient being obliged to rest upon the back. There were swelling and hardness of the muscles of other parts of the body, especially of the right arm. At this period of the disease (March 25) there was ecchymosis in the bend of the right arm, extending over a surface from four to five inches in diameter, which disappeared in the course of a few days. The back also became ecchymosed, having a dark purple and yellowish hue, extending from the hips to the top of the shoulders, which condition continued until death. Some time in the early part of March there first was observed upon the head a small tubercle or tumor, "as large as the end of the finger." From this time to the 15th of March, a few were noticed upon the arm, and in a few days several upon other parts of the body. After this period the development of tubercles or tumors was remarkably rapid. Within the short space of two or three weeks, from the latter part of March to the 15th of April, their number had augmented to one hundred and fifty or two hundred. What seemed most remarkable, they appeared to "sprout up" and become fully developed in the short space of twenty-four or thirty-six hours, attaining their full size, and making no perceptible increase thereafter.

These tumors varied in size from that of a millet seed to a hickory nut. In form, some were rounded, others oblong or oval. In structure lobulated, and having an elastic feel, and were principally located in the subcutaneous cellular tissue. A large proportion of them presented no discoloration of the skin, while others were of a purple or dark purple appearance. After a full development of the diseased condition, about the middle of March, 1872, the vital forces rapidly declined, and the patient sank and died from exhaustion on the 30th day of April, 1872.

A post-mortem examination revealed in the cavity of the abdomen a large number of tumors on the serous membranes, in character and size like those found upon the surface of the body. Some were located upon the diaphragm; a large number upon the folds of the mesentery; and one or two upon the reflection of the peritoneal membrane upon the liver. There were none in the liver, spleen, pancreas or kidneys; these organs were in a comparatively healthy state. The psoas muscles were swollen and hard. The chest and cranial cavity were not examined. Upon section of a number of the swollen muscles there was found what appeared to the naked eye extravasated blood, in a partially decomposed state. After the death of the patient several of the tumors were extirpated, and portions of two were submitted to microscopical examination, Drs. Loring and Franklin, of Columbus, taking part in the examination. From the manifestations obtained in this examination, the cell form and its peculiar structure, the conclusion arrived at was that these tumors were carcinomatous, and in character encephaloid melanosis.

Medical Societies.

Central New York Medical Society.

The annual meeting of the Central New York Medical Society commenced its session in the Common Council chamber, in Rochester, on June 19, at ten o'clock. Dr. B. L. Hovey, of Rochester, President, in the chair. Dr. T. S. Brinkerhoff, of Cayuga county, Secretary.

Dr. W. S. Ely read a paper on Cholera, from which we make the following extracts:—

What its Salient Pathology.

The poison which produces the profound disturbance in cholera has been supposed to act primarily upon the blood as a rapid disorganizer, or primarily upon the nervous system, derangement of which excites blood changes. A few hold that we have to deal with a local intestinal disease (Snow's theory). Everything points to a specific poison of intense energy, which rapidly takes from the blood its water and salts, early affects the kidneys, causing suspension of urinary secretion, and, as the algid state is developed, lowers the temperature. I purposely omit symptoms, and pause not to detail frequently observed appearances of intestines, liver and kidneys, but desire to point especially to the pulmonary circulation, with reference to a theory of collapse now largely accepted. Collapse is not chiefly due to the drain of liquid from the bowels, as supposed, because collapse and discharges are often in inverse ratio. Stimulants do no good, and recovery is at times too rapid to be consistent with this view. What, then, is the explanation? It is that the essential cause of cholera collapse is an impeded circulation through the lungs, due to the contraction of minute pulmonary arteries upon poisoned blood. Autopsies of those dying in collapse show always the left heart empty, while the right heart and systemic veins are distended. There seems to be a "stop-cock" action of minute vessels upon the poisoned current by which it is arrested before it can reach the capillaries. A scanty oxygen-bearing stream results, and consequent lowered temperature, with suppression of the secretions dependent on oxidation, bile and urine. It is this pathological observation of the pulmonary condition that gives the strongest coloring to Johnson's "eliminating treatment." The discharge from the stomach and bowels being the means by which the poison is thrown off, we must aid them; but, alas! the poor patient can neither withstand the poison nor the shock to his system which its expulsion imposes.

The Treatment of Cholera.

With diverse views as to the causation and pathology of the disease, we expect a corresponding difference in methods of treatment. As in well-established cases about as many have died under one plan of management as another, not much encouragement can be offered for any particular line of practice. If you wish to give calomel in doses of 20 grains or ½ grain, if you make *opium* or *ipecac.* your sheet-anchor, or from a malarial stand-point give quinine, if you rely on castor oil and cold water, after Johnson, or decide to inject saline solutions into the veins, for the deceptive improvement it will furnish, or, finally, if you fold your hands and employ no medicine, I will furnish you respectable authority for any of these plans. This is not encouraging, and should stimulate our efforts to improve our therapeutical resources. The judicious treatment of symptomatic indications will save lives, and in the absence of more definite knowledge should be our rule.

Its Prevention.

Sad, indeed, gentlemen, would be the whole history of cholera did not great encouragement come to us under this head. Though study and research have confessedly added nothing to our ability to cope with the fully formed disease, they have resulted in incalculable benefit by pointing out the practicability of its prevention. The arrest of the premonitory diarrhœa is, in the large proportion of cases, possible, and in every cholera epidemic the public should be instructed in reference to it by published statements or house-to-house visitation. Remember that Fary, the great English statistician, believes that "the evidence of cases of algid cholera without premonitory diarrhœa is imperfectly established." A cholera scourge is always preceded and accompanied by an increase of intestinal disorders, and these are produced and aggravated by unsanitary conditions. It is now established, beyond question, that crowding of population, filthy streets, decomposing organic matter, and, above all, foul privies, and defective or clogged sewers, when taken with high temperature and moist air, are productive of diarrhœal disorders, and in cholera years favor the rapid spread of the epidemic. New York city has its "diarrhœal fields," as they are called, where the above conditions prevail every year, occasioning great mortality. Witness the cholera epidemic of 1866. It invaded these districts almost exclusively, and was only controlled by a thorough police and lavish use of disinfectants. It is not my aim to cite proof for these assertions; it is furnished in abundance in recent reports on cholera epidemics. Let one instance suffice. In the 1866 epidemic on Blackwell's Island there were 123 deaths in nine days. On the fourth day, when the epidemic was at its height, Dr. F. H. Hamilton gave his pledge to the Board of Commissioners that he would drive the cholera from the workhouse in from three to five days, if certain instructions were carried out. On the fifth day the pledge was redeemed, and not another case occurred. Turning all the inmates out of doors, and disinfecting every stool, every latrine, every vessel, accomplished this result. Of the epidemic in New York city it was said that "events proved

that vigilance was the price of safety. If any one doubts the necessity and usefulness of thorough cleansing and disinfection, the experience of September would remove such doubts." The problem of disinfection, then, is the one we should address ourselves to in anticipation of cholera, and in its actual presence. Thorough use of sulphate of iron, the chlorine and bromine compounds, carbolic acid and coal-tar agents, and fumigation of houses, conjoined with organized inspection, will rob the epidemic of its terror and its fatality. Quarantine should be enforced, but not regarded as an absolute safeguard.

The Committee on Communications announced an article entitled "Some Remarks on Pepsin," by Dr. Didama, of Syracuse.

The article referred to the humorous allusions to physicians' habits and diet made at a recent meeting of the Monroe County Society, and in the same strain described his breakfast at the Osborn House. The prevalence of dyspeptic difficulties in the community was alluded to. The history of a series of experiments with three specimens of pepsin, the German, French and American, was also given, and the deductions from his experiments were that pepsin, or artificial digestion, was a feeble agent, as well as in normal digestion. Grimaults, or the German pepsin, was proven to be the best, but as a therapeutic agent was of slight value.

The Committee on Communications announced an article "On the Use of Setons in Uterine Therapeutics," by Dr. Van de Warker, of Syracuse. The value of this form of treatment, as compared with the use of powerful caustics, was discussed at some length, and its apparent advantages described. Its use being novel in many respects, the attention of the profession was called to it. Cases in which it had been used were cited. The paper was favorably received.

Dr. E. M. Moore then read the history of a patient, a case of suppuration of the ankle joint, chronic in character, the patient being present. The disease proved to be "Caries of the Astragalus." This was treated by removal of the astragalus. This was done by crushing the bone, and removing the fragments, after treatment by splints, etc., the wound healing by granulation; not healing perfectly, the wound was reopened, and the diseased end of the tibia removed. The length of continuation of the case was remarked, and some speculations as to a different course of treatment made. The patient then exhibited the joint, which was a good one. The deductions made by Dr. Moore were that in similar cases, and those of compound dislocation of the ankle joint, the removal of the astragalus would be the course which he should pursue.

Annual Address.

From the address of the President, Dr. B. F. Hovey, we extract the following:

My only purpose is to present some of the popular obstacles thrown in the way of true medical science, and, if possible, correct an evil which is based upon those deficiencies of human judgment which are generally called "human folly."

Individuals who occupy positions of learning and influence, theologians and lawyers, and who in their general character have not the reputation of being arrogant or conceited, constantly and confidently place their opinion and views in opposition to those of the whole medical profession, and lend the influence of their names and position to the support of opinions which have not been to them a study, in opposition to the judgment of that profession which has made them a matter of most careful investigation. This fact proves that folly is not confined to the illiterate, or to those who are marked specimens of imbecility, but that it pervades all classes, dilutes learning, and humiliates station.

It shows also that the nature of the profession of medicine is not understood, and that the popular ideas in regard to it are formed from a most narrow and limited view of what constitutes the profession. These ideas are no doubt derived from an acquaintance with but a single division of the science of the profession, and this division is only brought in contact with the people. Individuals rarely stop to consider that the profession is composed of men who pursue it as an art, and that its working men assiduously labor and carefully drudge in the application of its means and details to their desired end.

Many, no doubt, regard the art of medicine (and perhaps most generally it is understood) as a mere routine acquaintance with the symptoms and names of diseases, and the application to those symptoms and diseases of certain remedies which experience has taught to be available.

But were such views correct, a decent modesty would teach those who feel the necessity of deferring to the judgment in his vocation of their tailor, shoemaker or blacksmith, to pay a similar regard upon medical subjects to those who have made them their study.

To him who has been educated in the profession a very different and more expanded view is presented. He sees it in its various divisions and vast arrangements spread out over the civilized world, and acting with all the power which can be derived from an aggregation of the highest order of intellect, disciplined and strengthened to the utmost for its work. In every branch or division of his profession he sees a large collection of names, whose ability and whose mental power demand the admiration of all who can appreciate their labors, labors to which nothing short of the greatest intellectual strength is adequate. Here the eye of the professional man extends over the entire civilized world, and he sees at a glance, men in the profession studying man in health and disease, from the microscopic elementary atom of each organ up to his full development.

The science of medicine, then, by its very nature, by the principles which govern the human mind, can limit itself to nothing short of attainable truth, and cannot be limited by, or bound to any system. In the science of medicine there can be no "old school" or "new school," and the use of such terms creates false impressions and misleads the popular mind. Professional truth, as it is seen by scientific men, should be presented to the people, and made a means to impart efficiency and understanding to the human intellect, as the best safeguard against any fallacy or system. When professional truth is properly presented and clearly understood, it must of necessity claim respect and confidence from the popular mind. History has sustained its decisions upon bygone medical delusions, no matter how strongly those delusions have been supported by popular enthusiasm; and it is certain that what the science of medicine now pronounces to be delusions will prove to be such. If any system or scheme sets itself above professional investigation—which is bound to seek for truth—and claims to be a new school or system, the claim and the pretension are alone proof that it is not true. If any new claim to medical science have the least particle of truth in it, according to the laws which mind must obey, that particle must be added to the general fund of medical science. We often hear it said that "new schools," systems or sects have medical hospitals, colleges and journals, independent of general medicine. If such is the case, it only proves that the disciples of such an arrangement have shut themselves in a very narrow circle, and prohibited themselves from the broad search for truth, wherever it may be found. They have bound themselves to a one-man dogma —to a system, not to a science.

There are a very large class of credulous persons who believe in all medical novelties and pretensions, while there is another class who repeat the maxim, "nature is the best physician," and refuse all aid for their maladies. This class imagine that they are sustained in their position, because they hear the most intelligent teachers of medical science say that our wisdom is derived from the observation of the laws of nature. The physician well understands that there is no relation whatever between the popular opinion referred to. and scientific obedience to the laws of nature. An acquaintance with these laws implies a vast amount of information, and teaches the natural means by which their irregularities are to be corrected, and teaches also the certain danger which permits the aberrations of nature's laws to go without correction. If one of these persons should receive a severe wound of an artery he would not trust to "nature as the best physician," but would apply to one, who from the observation of the processes of nature has learned how to stop the flow of blood. As great and as fatal injuries, from the progress of disease, may be going on in the organs, and this truster to nature does nothing and dies from a curable disease which would be very apparent to the skill of the physician who had been taught by experience and learning to search it out. We admit nature is the best physician, but nature requires an industrious and devoted work, to secure its co-operation and attendance in preventing and curing disease. Where her laws are neglected, she is apt to visit by disease as a penalty, upon those who are daring or unmindful of her requirements. So the best advisers to nature's laws are those who most assiduously study them in all their relations to man, and to be competent in this requires extensive learning. We may here claim and assert that the physician is then the vigilant observer, faithful follower and intelligent assistant of nature in preventing and curing disease. Those most learned in the profession know that while their chances of arresting disease depend upon the extent of their acquirements, yet they know that there is nothing attainable by human intellect which gives the power of certainty.

Dr. E. V. Stoddard, of Monroe, had some general remarks upon the pathology of cerebro-spinal meningitis. The characteristics of the epidemic recently prevailing in this county were pointed out, and the course of treatment which had proved most satisfactory. A tabulated statement of the peculiarities of a large number of cases was presented, and the comparative mortality rate of the disorder in this section shown to be lower than the average.

Dr. W. S. Ely exhibited an instrument for the easy extraction of beef juice, and made some remarks upon the efficacy of pure juice of beef as an article of diet in cases of extreme prostration.

Dr. Benedict, of Onondaga, reported a case of hemorrhoids which he had treated successfully with suppositories.

Dr. Miner, of Buffalo, then addressed the Society on the subject of ovarian tumors. His method he accidentally stumbled upon a year or two ago. The operation was performed without the ligation of the blood vessels. Several operations under this plan had been performed successfully. This might seem strange and beyond belief. He exhibited a tumor weighing eighteen pounds, which had been removed within twenty-four hours previous by himself, by his system. It obviates all the difficulties before discovered by surgeons in cases of ovarian tumors. On the conclusion of the Doctor's address he was greeted with applause.

The thanks of the Association were then, on motion, voted Dr. Miner for his able address and exposition of his plan or discovery.

Dr. E. M. Moore made some remarks on the dilatation of the female urethra. He gave several illustrations. For the purpose of dilating the urethra he had found—by accident as might be said—that the finger was the best instrument. This plan was entirely new so far as he knew.

One lady, Miss Amanda Sanford, M. D., of Cayuga Co., graced this meeting with her pre-

sence as a delegate from the Cayuga County Medical Society. Miss Sanford graduated from the Medical College at Ann Arbor, Mich., and passed two years in the Female Hospital in Boston, Mass. She is a highly educated lady, possessing a large practice in her specialty of treating diseases peculiar to her own sex.

The following officers were elected:—

President—Dr. Gilmore.

Vice Presidents—Dr. Bolter, Dr. Eastman.

There being no further business the Convention adjourned to meet again in this cityon the third Tuesday of December next.

Editorial Department.

Periscope.

Concealed Præ Partum Hemorrhage.

Mr. Joshua Parsons, of Frome, writes to the *British Medical Journal*:—

The three cases which I am about to detail have occurred to me at long intervals in a tolerably extensive midwifery practice of many years' duration; and, although they belong to a class well recognized and often described by writers on the subject, yet I have found in conversation that many brother practitioners of intelligence and experience, not having had their attention specially directed to such cases, possess but vague ideas of their nature and treatment. There are, however, few accidents interfering with the even tenor of natural parturition more distressing to witness, or calling for more clearness of diagnosis and decision of treatment on the part of the medical attendant, than those of which I am about to speak. It has, therefore, struck me that a record of these three instances, though not otherwise very interesting, may form a footprint for whose guidance some perplexed and anxious brother may be thankful.

Case I occurred in 1840. The patient was the wife of a weaver, a strong and healthy primipara, arrived at the seventh month of gestation. On February 8th she was seized with faintness and a feeling of painful distension of the abdomen; but, as no labor-pains occurred, no treatment was adopted by the midwife beyond keeping the patient in bed. As, however the pallor and distension increased, I was summoned on the 12th, and found the woman exhausted and exsanguine to a remarkable degree. Upon examination, although there had been no pains or discharge, the os uteri was flaccid and dilatable, the membranes unruptured, and the face presenting. I had at the time no idea of the nature of the case with which I had to deal; but possessed with the dread, instinctive in an accoucheur, of seeing my patient die undelivered, and miles away from instruments or professional assistance, I introduced my hand into the unresisting uterus, and immediately delivered the small dead fœtus by the feet. Finding the abdomen but little diminished in size, I thought there was another child to be born, and plied the woman freely with brandy and ergot; and after a while had the satisfaction of finding the placenta thrown off. The cause of danger and perplexity then became evident; for I removed from five to seven pounds of old black coagula. The uterine surface of the placenta showed that it had been detached over its larger part. The woman slowly recovered to a great extent, but was ever afterwards an invalid and remarkable for her extreme pallor.

Case II occurred on December 4th, 1860, to one of those unhappy individuals whose bairntime (to use a Scotticism) was a catalogue of disasters. She had arrived at the eighth month of her eleventh pregnancy, when she was, at 4 o'clock on the morning mentioned, while lying quietly in bed, seized with sudden deadly syncope. As she lived close to my house, I saw her in a few minutes; and, recognizing the nature of the case, I examined and found the head presenting and the funis prolapsed. Being thus enabled to assure myself that the child was dead, and knowing from former experience that to deliver the patient with forceps was a work of time and difficulty, I did not hesitate to resort immediately to craniotomy, and, after giving ergot, to remove the placenta and a large mass of coagulum which appeared to be of recent formation. The patient recovered and had children subsequently.

Case III.—This patient is the wife of an innkeeper living four miles from my house, and was expecting her seventh confinement in November last. For four days she had been observed to lose her color, and complained of hardness and tension of the abdomen, but had continued to move about and attend to her household duties. On the afternoon of the 19th she fell suddenly in her kitchen, and was for a long time unconscious. When she was carried to bed, a slight discharge of blood was observed, and I was sent for, being told to come directly, as she had a fit. When I arrived she had become conscious, but was tossing about faint and pulseless, with no labor-pains, but

a slight sanguineous discharge from the vagina. On examination, I found the os about the size of a shilling, occupied by distended membranes, but very hard and resisting. I immediately sent to my son, Dr. Parsons, asking him to bring various instruments, and intending, as the urgency of the case seemed increasing every moment, to deliver as soon as he arrived. As, however, by reason of distance, a considerable time must necessarily elapse, I determined to do something; and so I ruptured the membranes, and gave at once two drachms of the liquid extract of ergot, repeating the dose in half an hour. Fortunately these means were successful in controlling the hemorrhage; and on my son's arrival the aspect of affairs had so much improved, that we considered it right to wait awhile and watch for the issue. About midnight labor-pains came on, and the woman was delivered naturally about 2 A. M. The child had been evidently dead for some days, and the placenta was followed by a great gush of fluid blood and many pounds of old clot. The woman is still suffering from exhaustion and bloodlessness, but will, I trust, ultimately recover.

The cause of the accident of which I have been speaking is, to me, obscure. In neither of these cases had there been any overexertion, nor had either of the patients been exposed to any of those shocks of body or mind which we are accustomed to see followed by hemorrhage and premature birth. In the first and third cases, the pallor and painful distension showed that a moderate discharge of blood had been taking place between the placenta and uterine walls for some days before a sudden and unaccountable increase occurred and produced the alarming symptoms already described. Although the issue was fortunate in these instances, yet I need not tell you it is by no means always so, two or three fatal cases having occurred within my own knowledge. In the last case, my distance from home led me to adopt measures which fortunately proved successful; but, looking at the tendency to sudden increase of symptoms, I would not voluntarily run the risk of delay, but should make it a rule, where I had reason to believe that subplacental hemorrhage was going on, to induce labor and complete the delivery of the patient by the speediest method suitable to each particular case.

I do not know any condition likely to cause difficulty in the recognition of this accident. In the second case, the sudden and complete collapse and violent pain might at first have led to a supposition of ruptured uterus or abdominal pregnancy; but the round, well-defined uterus, hard as a cricket-ball, and perhaps the absence of tenderness, would at once clear up the difficulty. In neither case did I observe any diseased condition of the placenta likely to account for its separation from the uterus, though the appearances plainly indicated that such separation had taken place to a very large extent.

Local Treatment of Gleet.

Dr. I. B. Woodson, M. D., Demonstrator of Anatomy in the Kansas City College of Physicians and Surgeons, writes to the Kansas *Medical Journal*:—

The writer takes it for granted that the profession at large consider gleet to be, in a majority of cases, an affection of the membranous and prostatic portions of the urethra, and posterior to the triangular ligament. This is his own experience in a large number of cases that have come under treatment, and he has seen but very few instances in which any considerable disease existed anterior to this part of the canal.

A little reflection will readily show why the disease so generally occupies this locality. A patient contracts gonorrhœa; from some cause the inflammation extends along the urethra until it reaches its membranous and prostatic portions, where it will linger an indefinite time in spite of all ordinary injections and constitutional treatment. It might be readily cured if it could be reached; but the writer firmly believes that an injection used in the ordinary manner never reaches the prostatic or membranous portions of the urethra; so that all the treatment amounts in fact to letting it alone, and it has but little disposition to get well of itself.

The opinion is entertained by some able men in the profession, that an injection can be thrown into the bladder from the meatus urinarius; but the writer has attempted the thing so often as to be convinced it is an impossibility. He contends that disease in this locality must be treated locally, by the actual contact of the injection with the diseased surface, to which should be joined external counter-irritation. He has used for the last three years the deep injections. These can be best applied by means of a rather large sized catheter, pierced at the curved end, with small holes for the space of two and a half or three inches, and having the eyelets closed. This instrument being introduced, the injection is thrown in by a strong rubber syringe, with a long beak large enough to fit tightly in the end of the catheter. This instrument the writer has found to be much better than the catheter-syringe. The disease being reached by these means, it is as easily controlled as it could be in any other situation. The writer has been so fortunate as to effect cures in cases that had baffled all the skill and patience that had been brought to bear upon them.

R—— F—— came under treatment July 10, 1869; had gleet following a gonorrhœa, contracted while in the army in 1862, *seven* years previously; had had more or less discharge ever since, but had never to his knowledge contracted a fresh clap. This case was treated by the method above mentioned, and also by a blister of cantharidal collodion applied externally to the whole length of the under side of the urethra; this treatment is rather severe, but it has generally been found to be effectual.

The injection used through the catheter was at first nitrate of silver, grs. 5 to the ounce of water. After a while it was changed for tinct. of iodine, dr. 1 to the ounce of water. As constitutional treatment the patient took tinct. of chloride of iron and tinct. of cantharides. This case yielded slowly. A great many different remedies were employed; but finally, at the end of three and a half months the overjoyed patient pronounced himself entirely well, and he has never been troubled with the complaint since.

C. P. S. came under treatment January 10th, 1870. Had had gonorrhœa very often; did not remember how many times; had had a discharge, variable in quantity, for nearly three years; had tried all manner of injections, and had taken "a barrel of copaiba," all of which had had only a temporary effect; he was then "as bad as ever;" and also had spermatorrhœa. The treatment was commenced by blistering the perineal portion of the urethra, and as soon as the resulting soreness permitted, the catheter was brought into requisition, and a mild solution of tincture of iodine, dr. ½ to one ounce of water, was injected; this was followed by nitrate of silver, and subsequently by Monsel's solution, and in two months the case was discharged cured.

The writer might mention a great many similar cases. The treatment is rational, and offers a vast advantage over any other of which he is aware. One great point is *patience*. The surgeon must not expect to take these cases by storm, and to cure long standing disease in a very short time. He must "fight it out on this line, if it takes all summer." There are very few cases that will resist the treatment if it is fairly applied. In a record of over twenty-five cases treated in this manner there was but one failure, and that was owing to the dissipated habits of the patient. The blister over the course of the urethra is especially recommended, even if it should confine the patient to bed; if it should, all the better for him. The cardinal point in the treatment of this disease is, that it is just like a similar disease of mucous membrane in any other accessible situation, and is, *mutatis mutandis*, amenable to the same modes of treatment.

Phosphorus in Skin Diseases.

This has been highly lauded by Dr. Fox and others. In an article in the *Dublin Journal of Medical Science*, Dr. EAMES says in reference to its continued use:—I have found that phosphorus produces a coated state of the tongue, not unlike the silvery tongue which follows the prolonged use of arsenic. Loss of appetite, mental depression, and bodily weakness, also are induced much earlier in some cases than in others, but to be watched for in all cases in which the drug is given. On the earliest appearance of dyspeptic symptoms I now discontinue its use, and administer some of the mineral acids. Many patients have mentioned that some two or three minutes after taking the medicine a pleasant sensation of warmth is felt through the entire body. I have not ascertained that any aphrodisiac effect is produced, though I have frequently inquired after it. A slight diaphoresis is observed occasionally. Diarrhœa was not induced in any of my cases. The amount of urine in some was slightly increased. An analysis made by my friend Dr. Cameron failed to detect any deviation from the standard of health.

Most of the foregoing cases had been treated by arsenic and other drugs before coming under my care. I have at hand notes of numerous other cases, which have been from the first treated successfully with phosphorated oil; these I have not detailed, as the intention of the present paper is to prove that the administration of phosphorus will cure certain cases of cutaneous disease, even after mercury, arsenic, and other remedies, vaunted as specifics, have completely failed to do so. I may mention, however, that eczema of the scalp, with enlargement of the glands of the neck, is very amenable to treatment by phosphorus. The strumous character of this disorder, and the difficulty of its removal, are very generally admitted. I have seen in many cases a copious eczematous eruption on the head and behind the ears, combined with greatly enlarged *glandulæ concatenatæ*, disappear in a few weeks after this treatment had been adopted, the glands being also quickly restored to their normal size.

Treatment of Small-Pox by Baths.

At a recent meeting of the Dublin College of Physicians, Dr. H. BENSON called attention to a form of treatment so prominently brought before the Society on a late occasion by Dr. Stokes. He referred to the treatment by the bath. He was so struck by the result in Dr. Stokes' cases that he determined to adopt the treatment in the next suitable case he met. In a very few days such a case presented itself. The patient was a gentleman residing in one of the suburbs of Dublin. He suffered from an extremely bad form of confluent small-pox. It was remarkably confluent, not only on the face, but also on every part of the body. The pustules were not well filled, but were flat, and the face presented the appearance as if a wax candle had been dropped over every part of it. During the secondary form the delirium became exceedingly troublesome, and the patient quite uncontrollable. For the previous twenty-four hours he had not been in bed for five minutes, and he had had no sleep for over thirty-six hours. Hypnotic remedies had no effect, and it was not possible to apply leeches or other applications to the head. With some difficulty he was placed in a slipper-bath, of the temperature of 98°, and he immediately exclaimed, "it's glorious, it's delicious, it's delightful." He became at once calm, collected, and obedient, and within fifteen

minutes he ceased to have any delirium. After half an hour he slept in the bath for two hours, occasionally waking for a minute or two while fresh water was being added. He (Dr. Hawtrey Benson) kept the patient in the bath for five hours and a half, removing him after that on account of headache which supervened. He was then put to bed, perfectly free from delirium, and with the help of fifteen grains of chloral (of which four times that dose had no effect previously) he slept uninterruptedly for eight hours. The case progressed from that out without the slightest check. Dr. Hawtrey Benson thought that this treatment did not receive its due measure of attention at the hands of the profession.

Dr. Grimshaw asked what was the temperature of the man's body when he went into the bath.

Dr. H. Benson replied that the temperature could not have been lower than 104°, and the bath was at least six degrees lower.

Theory and Treatment of Sea-sickness.

Dr. POLLARD says, in the *British Medical Journal*:—

The most probable theory of sea-sickness is that held by Dr. Carpenter, Mr. Bain, and other writers, who consider that the mental and bodily prostration and other symptoms arise from the continued action on the brain of a certain set of sensations, more particularly the sensation of want of support.

This feeling arising from the sudden loss of support, as when the footing or any prop that we lean upon suddenly gives way, is one of a most disagreeable kind. Should the accident have been perilous to life, as when the foot slips close to the edge of a precipice, or a rope cracks in Alpine climbing, a sickening feeling seizes the brain, the whole frame is agitated, and cold perspiration is felt all over.

The phenomena of sea-sickness appear to be due to the constant repetition of this feeling of loss of support, consequent on the pitching and rolling of the ship, more particularly the former. This explains the fact that the distress is most acute at the moment of the descent of the ship; whereas, when the part of the vessel in which the sufferer is placed rises beneath him, a comfortable sense of support is felt. It is well known also that the distressing sensations may be to some extent warded off if a downward motion of the body be made at the time of the ship's descent, and an upward motion when the vessel rises. In this way a kind of voluntary character is given to the sinking of the body, the nervous system is not taken so much unawares, so to speak, and thus the sensation of loss of support is less acutely felt. The feeling of want of support resides essentially in the muscular system; but the sensations of other senses contribute towards it. The sight of continually shifting lines and surfaces is an important factor; and on board steamer the constant vibration, the noise of the machinery, and evil smells of various kinds, are other items in the elements of causation.

That vision has something to do with the production of sea-sickness, is shown by the fact that closing the eyes will often keep off the sickness for a time; and in illustration of this point, we may refer to the general depression, faintness, and even nausea, which may be produced in susceptible persons by "doing" too many picture galleries in rapid succession, and this not dependent on the quality of the pictures themselves. That the vibration and noise may add to the general depression is shown by the painful effect produced on a person not used to it going into a large room of a cotton factory, full of steam-looms at work. As regards smell, I can testify that going down into a hot cabin and sitting close to a reeking joint of boiled mutton, has nearly brought on sea-sickness, only warded off by a timely retreat into the upper air.

The constant unpleasant impressions, then, on all the senses, contribute something to the mental depression and the bodily disorder which constitute sea-sickness; though, no doubt, the main factor in its production is the continual feeling of want of support, suggested partly by the visual organs, but chiefly through the muscular system.

As regards treatment, since sea-sickness arises from certain impressions on the senses, the obvious indication is to render these sensations as feeble as possible. Application of the mind to an engrossing book will keep it off for a short period; and Dr. Chambers relates that his having to bind up a broken finger of one of the seamen relieved his own distress for the time. But the mind will speedily become alive to the sensations which force themselves on its attention. In order to lessen them as much as possible, the patient should preserve the recumbent posture, as near the centre of the ship as possible; he should lie on a thickly padded couch, so as to diminish the vibration. Fresh air should be admitted in order to remove bad smells. The eyes should be shaded, and as much noise as possible shut out. As regards drugs, the most rational suggestion is that of Dr. Döring, of Vienna, that a full dose of hydrate of chloral should be taken shortly before the vessel starts; and even in long voyages the repeated use of this medicine will insure comfortable nights without the disagreeable after-effects of opium and chloroform.

AMERICAN MEDICAL ASSOCIATION.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

WM. B. ATKINSON,
Permanent Secretary.

MEDICAL AND SURGICAL REPORTER.

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S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

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ON SPECTRAL ILLUSIONS.

Dr. JOHN HENRY NEWMAN, in that remarkable volume of his, the *Apologia pro Vita sua*, says that a man who has once seen a ghost cannot be the same as if he had never seen one. That is very true; and it is remarkable how many people do see apparitions, or, if you will, spectral illusions. Sombody asked Coleridge whether he would be frightened if he was to see a ghost. "I have already seen too many," replied the poet-philosopher, "to be frightened at them." There was a depth of practical common sense in that remark, which makes amends for his foggiest speculations on the transcendental reason.

It is here, as in so many other things, the *ignotum pro mirifico*.

John Clodpole, going home at night, and whistling to keep his courage up as he passes the churchyard, is scared out of his five wits by the cow in the hedge, which he takes for a spirit; while Nicolai, of Berlin, who was attended for months by a whole troop of dancing imps, which nobody saw but himself, first described them in an able memoir to the Academy of Sciences, and then, rightly diagnosing that they depended on a disordered portal circulation, applied a dozen leeches to his arms, and, presto! quicker than if he had pronounced the mightiest exorcism of the cabbola, they disappeared forever.

So much for the difference between knowledge and ignorance, between the dark ages and a civilized epoch.

The fantastic images of delirium, the forms which the disordered brain of the drunkard pictures to his mind when on the verge of *mania a potu*, these are familiar to everybody. Why, then, should we wonder that occasionally, in apparent health, such bodiless visions present themselves to our gaze, startling us from our propriety, and scaring us, unless shielded by a knowledge of their impotence, into fearful thoughts of impending death and disaster?

Though, as we say, these apparitions are common in sickness, and not rare in apparent health, their precise cause is not clear. Recently, in *The Practitioner*, Mr. W. SPENCER WATSON has undertaken to demonstrate that a certain number or class of them have a physical cause in small extravasations of blood in the retina, which leads to the appearance of an extraneous object, to which, especially in a vague light, some form, fantastic, familiar, or ghastly, is assigned. This is especially true of such

visions as have permanence. He concludes:—

"It is possible in this way to understand how, in some cases, spectral illusions may be due to *physical* rather than to *psychical* causes, and such a method of explaining them will be reliable—1. When there is no other symptom of cerebral disturbance. 2. When the apparition is constant in its form and outline. 3. When it appears only in a particular axis of the eye. 4. When it is visible with one eye only; this is conclusive of the local character of the disease, quite independently of any other conditions, unless indeed the other eye is absolutely blind. 5. When ophthalmoscopic appearances, or those data obtained by oblique focal illumination, correspond with the descriptions of the supposed spectre. Whenever the spectral appearances change rapidly, and are numerous and variable, it is possible that they are due to cerebral causes, and cannot be attributed to intraocular disturbance alone."

Satisfied with this explanation, can we relieve our minds, and exorcise the flitting and variable ghosts, by some equally well-considered physical theory?

Dr. HIBBERT argues that they are analogous to those caused by nitrous oxide gas. This gas, he states, when inhaled with a certain proportion of air, produces an *increased volume* of the blood of the body, and the effect of this is to intensify all sensations, and especially those of a pleasurable kind. Then he points out that from the obvious shrinking of the tissues during the cold stage of an intermittent fever, we may assume the extreme mental depression associated with this kind of fever to be due to a *diminution* of the volume of the blood in the patient's body, consequent upon the presence of malarious gases.

Having, then, in these instances a *physical* cause of the intensification of impressions and bodily sensations—painful in the one, pleasurable in the other—the phenomena of delirium may be explained by further supposing an increased susceptibility to reproduce, as if by memory, the images of objects, which, existing only in the mind as *ideas*, are represented to it (in its morbid condition) as *sensations;* just as in dreams we are unable to recognize the difference between ideas and sensations.

We are not so sure of this reasoning as of the other, though we should be glad to be surer. For these ghosts are our kind, and it would be some satisfaction to argue out of existence a familiar spirit which once haunted us. It is not much of a ghost story, but as the best we have in personal experience we may as well not miss this chance of testing it.

The queerest point about it is that we saw that ghost in a fine, clear summer afternoon, when in perfect health, and just on leaving a playfellow. We walked from the room to go down stairs, and had proceeded but a few steps down when, there, leaning against the bannisters, facing us, with outstretched hands, clear and distinct in the summer light, stood a cowled figure, clothed in a long and flowing robe of some checkered material. The face was concealed by the hood, but the hands, seemingly grasping for us, were too horridly distinct ever to be forgotten. Thin, brown, skinny, the purple veins swollen, and coursing over and among the scarcely covered bones, there was no vagueness or uncertainty about their form and shape.

We screamed with fright, never taking our eyes from the figure. Our playfellow ran to see what the matter was. As he approached the whole vision floated into nothingness in mid air. Our health was good and remained so, but for a long time the fright oppressed the mind of even the healthy boy.

Grown older and wiser, that experience has impressed upon us the reality of many a story of haunted spots that others rejected; and the question of the nature and origin of these illusions has had an interest more personal than to many. Their influence in creating and sustaining superstitions, even in founding creeds and religions, has not yet

been fully understood. Their frequency in healthy subjects, which we have been at some pains to inquire about, is far greater than is generally believed. Afraid of ridicule, persons hesitate to confess to them till led on by a similar confession on the part of the inquirer. As to their cause, we are daily gaining means to determine it by the revelations of the ophthalmoscope and the study of functional nervous disorders.

Notes and Comments.

Mud Baths.

There are some baths in Hungary and Bohemia where visitors plunge themselves into a basin of soft mud instead of crystal water. These mud baths, *moorbader*, are quite popular in their neighborhood. So at Saint Amand, in the north of France, there are some famous mud baths salutary for diseased articulations, rheumatism, atrophy, etc. The patient is planted up to his neck in a hole in the soil filled with a black, soft mud, warmed by the thermal waters which well up through it.

We have some also in this country. In a late paper we notice that Grace Greenwood has become a convert to mud baths, and chants the praises of the Indian baths at the Geyser Springs, a California retreat, at the respectable altitude of 1690 feet above the sea. It is said that Edwin Forrest, while suffering from a severe attack of rheumatism some years ago, went into the Indian mud bath one day, and came out all ready to play Othello or Metamora.

Conservative Surgery of the Face.

The subjoined instructive case is reported by Dr. Meldon, in the Dublin *Medical Journal*:—

Thomas Dillon, aged thirty-five years, was conveyed to the hospital on September 3, 1870. As a laborer he was employed raising heavy weights on board vessels by means of a windlass; whilst so occupied the handle slipped, and flying round struck him on the face with tremendous force. On admission into the hospital he was quite insensible, and the face presented a frightful appearance. He had evidently been struck from the angle of the mouth on the right to the edge of the orbit on the left side. Both upper maxillary bones were fractured. The nasal bones pulverized; the prominent portion of the orbit flattened; the palate comminuted, and all the upper teeth, with their alveolar processes, and portions of the upper maxillary bones, hung loosely in the wound. The inferior maxillary bone was also fractured. The large flap containing part of the nose and upper lip were turned down over the chin and neck, suspended by two narrow portions of skin and muscle. A good deal of venous oozing was checked by cold. The upper teeth were replaced, and the soft parts brought as nearly as possible together, and kept in their place by means of sutures, together with an ordinary mask and a bandage. The right eye was found much chemosed, and although the lid was divided, it escaped all further injury. When the patient recovered sensibility it was found he could not swallow, but on the following day when the palate was fixed by means of a gutta-percha plate, power of swallowing returned. The patient made a rapid recovery, and left the hospital with a very good face. The teeth and bone attached remained for a considerable time so loose that they could easily have been removed by the finger and thumb; they have now, however, become quite firm, and he has made an excellent recovery. Some months after his leaving the hospital I performed a successful operation for entropion, caused by contraction after the accident; of the entropion there now remains not a trace to be seen.

Influence of Pregnancy on Uterine Cancer.

The following suggestions were made at a meeting of the San Francisco Medical Society, reported in the Pacific *Medical and Surgical Journal*:—

Dr. Whitney said: Does it not accord with universal experience that cancer is stayed in its progress by uterine evolutions? He ventured to say there was no one present but had seen the progress of cancer in the breast stayed by lactation. We did not see this disease in the child while growing. He agreed with Dr. Cole, that the tumor should not be removed. He had seen cases having every appearance of malignant disease in one of the uterine labia, in which repeated pregnancies occurred. In one of these cases there seemed to be commencing malignant disease nine years ago. The patient had borne three children since. Had

finally gone East to be operated upon. He had seen her three weeks since; there was but little change; none for three or four years. She was bed-ridden; used enormous quantities of opium. He began to doubt that the tumor was cancerous, yet the symptoms of this disease were present. He questioned whether cancer was not stayed by the normal progress of gestation, as in tuberculosis.

Tobacco and Health.

Dr. AUGUSTUS TRAFTON says, in the Pacific *Medical Journal*:—

The habit of chewing *tobacco* is not so much injurious from the toxic effects of the tobacco, as it is from the waste of saliva in spitting. The habit of chewing gum of various sorts, which is practiced to a considerable extent by our school children, and even by some children of a larger growth, is injurious as far as it engenders a desire to spit. Smoking tobacco may be classed in the same category; and I believe is more injurious from the loss of saliva than in any other way. Within the past few years I have taken the pains to inquire of great smokers as to the effect the practice of smoking seemed to exert on their systems. The result may be summed up in a very few words, loss of weight, anorexia, pyrexia, constipation of the bowels, and a morbid excitability of the nervous system. Nevertheless, I found two persons who seem to be exceptions to the general rule: one in San Francisco, and one in this city. They are both invetérate smokers, and consume from twenty to twenty-five cigars in twenty-four hours. One of them (the Sacramentan) tells me that he arises in the night at a certain hour "to have his smoke." In neither of these persons could I find, by a rigid cross questioning, any of the ordinary dyspeptic symptoms usually consequent on the habit of smoking to excess. But I found one fact which will go a great way in explaining the anomaly, and that fact is, that neither of these gentlemen *ever expectorates*.

On Thoracentesis.

The *Doctor* quotes from the *Bordeaux Medical*, of May 19, a leading article on Thoracentesis in the Academy of Medicine: "M. Chauffard, the old opponent of thoracentesis, has renewed the majority of the objections he had already urged against this method of treatment when applied to tubercular patients. It is injurious, he said, because it may conduce to a regrettable negligence, and even to forgetfulness of the medical treatment of pleurisy, and perchance because a too rapid evacuation of liquid favors the development of tuberculosis. It is worth noting that this old opponent of thoracentesis does not invoke against the puncture of the chest the purulent transformation which he formerly attributed to the operation. Doubtless, the numerous works published of late years on the subject have demonstrated to him the truth advanced by Trousseau, that the purulence of the liquid is due frequently to delaying the operation. As to the capillary trocars and the different aspiratory apparatuses, in spite of the double advantage which they have of only making an insignificant wound in the chest walls, and thus avoiding the introduction of air, M. Chauffard prefers to these the canula of Reybard and the membranous valve. We believe, contrary to Dr. Chauffard, that the progress accomplished in thoracentesis, in the provinces, in the confidence of practitioners, is in great part due to the capillary trocars and to Dieulafoy's aspiratory apparatus. The smallness of the puncture, the absence of pain, and the evacuation of the liquid without fear of the introduction of air, have reassured the timid. These commence to see that the puncture is not the cause of the purulence of the liquid: it will thus be more frequently practiced, and we are persuaded of its success. For it is a conviction which imposes itself inevitably, in fact, on all who have often employed thoracentesis, that it is one of the best modes of treatment of pleurisy, and that, aided by revulsions and derivations, it assures a prompt and solid cure. With such means combined there is no longer any pleurisy which remains six months, a year, or eighteen months without cure, and only gets well in the end after causing narrowing of the chest and exhaustion.

Iodoform in Syphilis.

The uses of iodoform in syphilis have been pointed out by M. Izard, whose conclusions are ably stated by M. Lapeyrère in *La France Medicale*. It is pronounced a good resolvent in simple bubo. M. Izard orders each morning after a bath an ointment of two parts of iodoform to thirty of lard to be applied to the bubo. In a few days resolution is brought about. If suppuration takes

place the ointment is to be suspended and an opening made, after which poultices are used for three days. Then, dressings with powdered iodoform may be used, or, if suppuration be abundant, a solution in glycerine or alcohol.

Chancrous bubo is not so amenable to this treatment. In the early period the ointment is useful if the limbs be painful. In the second period it is useless. Later, ulceration having occurred, rest is necessary, and, if the suppuration be abundant, repeated injections of the solution should be used, and after each a little cotton wool or charpie soaked in the solution should be introduced into the wound.

The ulcerative syphilides, rupia, gummata, yield rapidly to iodoform, as also do mucous patches. In short, the result of M. Izard's experience is that all venereal ulcerations treated topically by iodoform cicatrize from fifteen to twenty days earlier than under any other treatment.

Gonorrhœal or Urethral Rheumatism.

Dr. Thomas Bond, in the *Lancet*, proposes the latter term as the proper name for this form of disease, though he does not consider it as strictly rheumatism. It commonly occurs in men of anæmic condition and of sedentary habits, particularly where a gonorrhœa has been treated with copaiba or a long course of antiphlogistics.

The symptoms are anæmia, dull pain in the heels and ankles, pain and effusion in the knee-joints, afterwards affecting the elbows, shoulders, and hands. A peculiar characteristic is a congestion of the sclerotic. This never leads to destructive consequences. The general health begins to suffer. Exacerbations appear in the loins, and profuse perspirations follow; urine is scanty, bowels torpid, skin dry, tongue coated, face hectic, pulse feeble, etc. The urethral trouble varies from a profuse mucopurulent discharge to a very slight gleet.

The general treatment is quinine and hydrochloric acid, or steel and strychnine, with wine, stout, eggs, and high feeding; local applications of a soothing nature, and rest.

Injections of a solution of tannin, half a drachm, tincture of opium, two drachms, to six ounces of water, thrown in every four hours, aid greatly, by checking the discharge. Keep the injection in the urethra about a minute, then let it gradually escape.

He believes that urethral rheumatism is a slow form of pyæmic poisoning, due to a gradual vitiation of the blood by progressive absorption of the urethral discharge; that the discharge being permanently cured, the rheumatism soon can be cured, and will not return, unless from a renewal of the urethral trouble.

General Osseous Metamorphosis.

Recently, at the Pathological Society of London, Mr. Edward Hamilton brought forward a remarkable specimen of morbid deposition of bone. Of the patient, a woman about 30 years old, no satisfactory clinical history existed; she had apparently been of a rickety constitution. After death the thyroid body was found large and congested; the lungs were congested, the left lung being reduced in size. The vascular system was healthy, with the exception of a few specks of atheromatous deposit in the aorta. The abdominal viscera were generally healthy. The skeleton which Mr. Hamilton exhibited had undergone extraordinary changes. The upper part of the skull was bony, and no bony deposit had taken place in the meninges of the brain. The temporal muscles were atrophied, chiefly from disuse. The lower jaw was entirely anchylosed, and a ridge of bone ran perpendicularly down from the left zygoma. The patient had fed herself through a space formed by the loss of some front teeth. The head was firmly fastened to the cervical vertebræ. The spinal column was curved like the letter S. On the left side a mass of bone had formed in the areolar tissue between the pectoral muscles; and on the right side, in the same situation, a mass of bone bound together the humerus, the coracoid, and acromion processes of the scapula, and the ribs. The pelvis was large and oblique. Massive stalactiform bony processes connected the ilium, trochanter, and femur, on each side. The bones of the legs were comparatively free from disease. The ankle-joints were stiff, and the plantar ligaments were extensively ossified. The erector spinæ muscles were changed into enormous plates of bone running down to the crest of the ilium. The latissimi dorsi had also become metamorphosed, and a ridge ran from the occiput to the left scapula. The whole body had an inclination to the left side; and the left thorax was contracted. Mr. Hamilton suggested that Nature, in endeavoring to

compensate for a rickety tendency, had acted too energetically, and that an excess of bony deposit had thus occurred. The microscopical examination of the abnormal formation showed the Haversian system of true bone.

Gelatinous Disease of the Wrist-joint.

Professor JOHN WOOD, of London, said in a recent clinical lecture: I have to call your attention to another case of joint disease—gelatinous degeneration of the wrist-joint. I excised the wrist the other day. There we had a swollen, pulpy, elastic mass, not accommodating itself to the shape impressed by the tendons, as a fluid effusion does, but pushing aside the natural structures; in consequence of this, the joint assumes a rounder outline than in fluid effusion. This gelatiniform tendency in the synovial membrane affects the sheaths of the tendons in the same way, and you hardly ever find the disease confined to the joint alone. This contributes to produce a rounded swelling, which, in the earlier stage, is attended with hardly any pain. Why is there no pain? Because the elastic deposit separates the surfaces of the joint, invades, softens, and breaks down the fibrous, cartilaginous and ligamentous structures, and prevents pressure on the nerves of the joint. But pain comes when abscesses form in the softened tissues. They may form all round the joint, yet not communicate with it. Sir BENJAMIN BRODIE was the first to call attention to this form of disease. It is more intractable than any other. In five cases in which I have performed excision, there have been in three the satisfactory result of a tolerably useful, and in one case, movable wrist. In another, however, sinuses still remain, and symptoms of pulmonary tubercle have made their appearance.

Atropia in Diseases of the Eye.

In a recent number of the *British Medical Journal* Mr. C. S. TICEHURST, late dresser in the Eye-wards of Guy's Hospital, writes as follows:—The general rule at Guy's is to use atropia (the strength usually employed being one-fifth of a grain of the sulphate of atropia to an ounce of water) in all cases of ophthalmia in which the pupils are contracted, and to continue to do so until they are dilated; treating the ophthalmia, corneitis, etc., in other respects, according to their nature. Whether atropia acts by "procuring the eye physiological rest, or by causing contraction of the capillaries," etc., is an important undecided question. It is of the utmost importance, in cases in which the atropia has to be used for a long time, to avoid eczema, etc., of the eyelids, since the swelling of them may become so considerable as to render the application of atropia difficult or impossible; while, if the atropia be not used, the eye may be lost. To avoid this, either atropia gelatine should be ordered, or the patient told how to "drop in the atropia lotion;" this is done by *moistening* a middle-sized camel's hair brush with the atropia lotion, and merely *touching* the inner surface (conjunctiva) of the lower eyelid with the moistened brush. This may be repeated every five or ten minutes, according to the quickness with which we wish to dilate the pupil. The visible object of the use of atropia should be to dilate the pupil; the sooner this is obtained the better. The pupil should be kept dilated until the inflammation is subsiding. If eczema or erysipelas occur, it should be treated by frequently bathing the eyelids with alum lotion (two grains of alum to an ounce of water) and some of the milder ointment of nitrate of mercury to be rubbed on the inflamed part at bedtime, the use of the liquid atropia or that of the atropia gelatine being continued at the same time.

CORRESPONDENCE.

Case of Poisoning by Cantharides.

EDS. MED. AND SURG. REPORTER:—

On the afternoon of June 14th, 1872, the husband of Mrs. N. called for me, in great haste, saying his wife had, in mistake, taken Cantharides. On arriving at the house I found she had taken, as nearly as I could estimate from her statement, upwards of fifty grains. She was suffering with violent spasmodic pains of the stomach, accompanied by free emesis. Also great irritability and severe pain of the urinary organs, particularly of the bladder, attended by frequent micturition.

As her stomach had already been relieved by emesis, I, of course, gave no emetic. With the object of neutralizing whatever of the cantharides might remain in the stomach, I

administered charcoal. I also ordered the following:—

℞. Tr. opii,
Tr. camphor.,
Buchu ext. fl.,
Spr. æth. nit., aa ʒss. M.

S. One teaspoonful to be taken at a dose, repeated according to the urgency of the symptoms.

In connection with the above I also gave a few powders of morphia.

Locally, I ordered a mustard sinapism over the stomach, followed by anodyne poultices; also warm applications over the bladder.

Under the above treatment the symptoms were soon relieved, and in the course of a few hours she was comparatively recovered.

A noticeable feature in the effects of the cantharides was its action upon the pulse, causing it to fall to about fifty per minute.

L. B. KLINE, M. D.

Catawissa, Pa., June 21, 1872.

Singular Abdominal Tumor—Autopsy.

EDS. MED. AND SURG. REPORTER:—

The following case merits a description:—

Mrs. C——, of Galesburg, Michigan, has for the last fifteen years suffered from severe pain in the back, confined to the lumbar region. About six years since a tumor was detected beneath the linea alba, just above the pubes. From this point it slowly and constantly ascended, from its increasing size, until it filled the abdomen, pressing beneath the ensiform cartilage, and rendering the linea alba like a tense cord, especially its upper portion.

For the past two years there has been severe pain in the right iliac region, and in the right hip, often very excruciating.

Several months since I attempted an examination of the tumor. From its position, and the slowness of its growth, I expected to find it uterine, of the fibroid class.

In the os uteri there hung a small polypus, and the *sound* passed but a short distance—no farther than though it was in a normal condition.

A number of experienced surgeons examined it subsequently, among whom were Drs. Hitchcock and Upjohn, of Kalamazoo, and Prof. Byford, of Chicago. There were several opinions as to its nature and connections amongst us, one considering it uterine, another ovarian, and another neither, etc.

She died June 12, 1872, æt 52 years.

AUTOPSY, TWENTY HOURS AFTER DEATH.

On laying aside the parietes of the abdomen, the bowels were found much displaced by the tumor, and adherent to it wherever they came in contact with it. The stomach was not adherent, but the duodenum was embraced in it to the extent of three inches, it seeming to permeate its walls, and from which it could not well be dissected. The arch of the colon was much depressed and firmly attached, and the greater omentum agglutinated to it.

In the right side, where so much pain had been felt, the kidney was enveloped by the tumor, and removed in i. The kidney, however, was much atrophied, little remaining but the cortical portion. It was attached to the spinal column by its posterior surface, from the prominence of the sacrum up to the first dorsal vertebræ. This attachment was firm enough to have sustained the weight of the whole body.

This growth undoubtedly had its origin from the prominence of the sacrum, and thence extended upward, because, as the swelling of the abdomen increased, the tumor constantly ascended. The left kidney was not involved. *It had no connection whatever with the uterus or ovaries.*

At its summit it was attached on the right side to the liver, to the extent of two square inches. On being removed it weighed about five pounds. It proved to be a firm, leathery, *fibroid* mass, and perfectly uniform from surface to centre.

The lady strongly desired its removal during life, and was somewhat encouraged to submit to an operation by some who pronounced it an "ovarian tumor," which might be removed with little danger. She and the family were restrained from so rash a proceeding by physicians in whose judgment they confided, and she was allowed to die a natural death.

The post-mortem examination showed most conclusively how impotent for good, and how potent for harm, such a procedure must have been.

M. W. ALFRED, M. D.

Galesburg, Mich.

MARRIAGES.

VANKIRK—DRABELL.—June 20, at the residence of the bride's mother, Morgantown, West Virginia, by Bishop Whelan, of Wheeling, West Virginia, W. F. Vankirk, M. D., of Newburg, West Virginia, and Miss Anna H., second daughter of the late John R. Drabell, Esq.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

HIP-JOINT DISEASE.

By T. Curtis Smith, M. D.,

Of Middleport, Ohio.

(*Concluded from No.* 803.)

Symptoms—First Stage.—The initiation and early progress of this disease are very insidious, and its gravity very liable to be overlooked. It is properly a disease of childhood and youth, though adults occasionally become the subjects of it. The first that may be observed is a limping, shuffling, or kind of dragging of the affected limb, which is usually worse toward the approach of night. This is frequently accompanied with weary sensations, and slight pain in the limb, or aching around the hip. Close examination will show an anemic appearance, more or less marked, and not unfrequently disturbed sleep, and possibly sweating through the night; but from this the patient arises in the morning to resume customary sports, and but little of the locomotive impediment above mentioned will be observed by any one till later in the day. This condition may continue for weeks or months, growing very slowly and stealthily worse. During this time it will also be observed that the child always stands with all the weight on the sound limb, which naturally tilts that side of the pelvis up and the diseased side down, thus causing the *appearance* of lengthening of the affected member.

It will also be observed that the weight of the latter rests on the toes or "ball of the foot," which is placed a little in advance of the other foot. This attitude is peculiar to this disease. (See "Attitude," *ante.*) Later, all the above symptoms become aggravated. The limping becomes more apparent, the pain more acute; the limb now shows marked atrophy, is soft and flabby; general emaciation is observable; the appetite and secretions become impaired, and sleep disturbed by spasmodic muscular contractions. The pain now complained of is located at the inner side of the knee, and will be sharp, lancinating, or dull, heavy aching. The knee, however, presents no signs of morbid change, and any reasonable amount of manipulation will fail to detect the presence of disease at that point.

The pain, however, is not always confined to the knee alone, for it will at times affect the different portions of the thigh, and in the acetabular variety be more confined to the hip. In one instance the pain was referred to the outer surface of the thigh at about the middle. In another case it was referred to the upper third of the gastrocnemius muscle, and sometimes seriously affecting the heel. Also a case, mentioned before, where the pain was located so much in the lumbar and sacral regions as to lead the attendants to treat the case for "spinal disease." These, however, are rather the exception than the rule.

When the first stage has advanced to this point, any movement or jar increases the suffering, also any changes of humidity or dampness of the atmosphere, sudden changes of temperature, the contraction of cold, or the suppression of any important secretion, especially of the skin, greatly aggravates the symptoms. It would be proper to say

that the severe suffering is not constant, but is irregularly periodic, being nearly always worst at night. Between these spasmodic attacks there are intervals of measurable comfort.

It would be proper to state that the thigh is also partially flexed on the abdomen. Barwell says the abdomen is partially flexed toward the thigh, and this is probably really true, for the spine, in the lumbar region, is always bowed forward, which would, of course, carry the abdomen towards the thigh. This is readily discovered by placing the patient on the back, when it will be seen that the weight rests on shoulders and sacrum, while the lower dorsal and lumbar portions are lifted well up from the couch. The leg is also slightly flexed on the thigh, and generally with the foot somewhat everted. Late in this stage, the pain for the most part shifts more permanently to the hip or its vicinity, and becomes more nearly continuous; the buttock may be slightly flattened. Pressure on the knee, trochanter, or percussion on the same, or sudden extension, will always prove the disease to be located at the hip, from the fact that these always increase the pain at that point.

Up to this time there is some perceptible impairment of the general health, yet not in any very marked degree. Another symptom, not mentioned above, is that the child, very early in the disease, will complain of pain if laid on the diseased side, also that there may be found some glandular swelling in the groin; and pressure in front or behind the trochanter will elicit expressions of suffering.

Second Stage.—The apparent lengthening now becomes more perceptible; the limp, if the patient walk at all, still more distinct, and attended with greater suffering. The buttock will also be flattened, and the gluteal crease effaced. A lateral twist of the spine will now be plainly seen; the pain in the hip and knee greatly increased, and the muscular spasm of the limb greater and more frequent, thus causing frequent waking, and pitiful expressions of suffering through the night; these symptoms always being worst after becoming warm in bed. The patient will also be observed to sweat freely when sleeping, and generally with an expression of dread on the face. The swelling at the hip is now more apparent, and this shows the more plainly as the limb below is considerably atrophied, soft, and flabby. The thigh is now constantly flexed towards the abdomen, and the leg upon the thigh, with the knee turned outwards, and the foot everted. The reverse of this position is occasionally seen, but this is the exception, and not the rule. The depression posterior to the trochanter is also obliterated. The knee will be found to be lower than the other, which would naturally follow the letting down of that half of the pelvis, which gives the seeming increased length to the limb. (See "lengthening," *ante.*) The swelling now becomes very apparent, and tumefaction, or even fluctuation, may be detected by a well-practiced hand. The pain in the knee now, though still present, is not as prominent as that in the hip. In some cases pain in the spine, at the lumbar or sacral portions, is a prominent symptom. The patient's system will now be in sympathy with the suffering; the expression will be that of suffering and dread; the brows knit; a dark circle round the eyes; emaciation and pallor very noticeable; the skin during the day dry and feverish; the appetite greatly impaired; bowels usually constipated; urine probably scant and high-colored; the tongue furred, or possibly covered posteriorly with a thick, yellow coating, with red edge and tip. All the secretions will be more or less imperfectly performed.

These symptoms continue to increase in severity unless checked by treatment, until the suffering becomes extremely excruciating, but still attended with remissions of comparative relief, which, however, grow shorter and shorter, and the attacks of pain proportionately prolonged and more frequent, till at last little remission occurs. At last a sudden lull in the storm appears, and the patient seems better for a time, perchance improves, and believes, if old enough to express it, he is recovering, and in this all his friends gladly add to his cup of consolation. The hip, however, still remains swollen and very tender.

This period of relief may last from one to several weeks, or even two or three months. But at last the delusive hope is dispelled, the calm and transient sunshine is suddenly displaced by a more fearful burst of the storm that had formerly prevailed. This is the lull, so deceptive, that occurs between the second and third stage. This period of relief is caused by the bursting of the capsule of the joint, which permits the hitherto

pent-up fluid to escape into the surrounding tissues; thus, in a great measure, relieving the extreme pressure on that membrane and the nerves in that vicinity. The point at which the capsule bursts will be determined by the point of initiatory attack of the disease, and this will largely determine the location of the future abscess and sinus or sinuses, which become of interest late in the course, both in deciding which part was first diseased, and the (to some extent) practicability of operative interference during the following stage.

Third Stage.—With the suddenness of a shot or stab the pain again attacks the hip with increased violence, and these shocks, if possible, continue to increase in intensity. Instead of apparent lengthening, we now have *real* shortening, but the shortening is not as great as it seems, as the pelvis on that side now tilts *up* instead of *down*, making the abbreviation *seem* greater than it *really* is. The trochanter major now is more prominent and the flattening of the buttock greater. Soon more tumefaction occurs, and at some point this becomes more prominent, being the point indicating the effort of nature to discharge the pus. The formation of pus is also indicated by a throbbing sensation and a feeling of pressure or tension. The patient now has light rigors or chills, followed by slight reaction, and a hectic flush is frequently present, in fact, nearly always so, at some period during the day or night. The limb is more apparently atrophied, and the swelling at the hip greater; there may also be œdema below the point of swelling, with enlargement of the subcutaneous veins, which have a characteristic purplish appearance. Every movement of the joint is now attended with the most excruciating pain, and the patient will be unable to move the body in any way without assistance, and this, not so much for want of strength, as in consequence of the agonizing pain it causes. The constitutional evidences of disturbance become very marked, and all the organs sympathize with the local disease, and in very many cases visceral involvement occurs to hasten the fatal issue in the case, when such an issue transpires.

The position of the patient, if left to himself, is now quite characteristic of the disease, and this same position is often noticed in the latter part of the second stage. He will never be found lying on the diseased side, though the contrary has by some been stated. He will either be lying on his back with the thighs flexed towards the pelvis and supported under the knee and at the side with pillows or sufficient props, or if he have no access to these means, will be lying on the sound side, with the body inclined towards the front, and the limb of the diseased side carried over anterior to the other, with the internal surface of the knee resting on the bed or on some object that will afford support. Also, in all attempts to move, the patient will seize the thigh with one or both hands, and carry it, if possible, without moving the joint, to the new position, where he will place it slowly and very carefully. This he does because the least friction of the articular surfaces causes agonizing pain.

Abduction during the former stages was a marked symptom; adduction is now equally apparent. Apparent lengthening being also present in the former, is now replaced with more or less shortening, and this is quite pathognomonic of the third stage. (See shortening *ante.*) When the matter becomes abundant it generally approaches the surface at some point in the vicinity of the hip, which may be known by an erysipelatous flush of the skin, and a doughy or boggy feel. Fluctuation may also be detected. The pus, however, may enter the pelvis, if the acetabulum has been perforated during the process of morbid action, or it may escape both internally and externally. When it enters the pelvis it may create serious inflammatory action, but will likely, sooner or later, find its way externally. It has been known to perforate the rectum, the vagina, or bladder, or collect in a pyogenic pouch between the iliac surface and the soft tissues immediately over it.

Usually, when the acetabulum is perforated, there is proliferation of tissue which prevents the pus from emptying into the pelvic cavity, or is sufficient to retain it within this space until the pus finds its way externally, after which there is little danger of its burrowing into the pelvis. Pus has also found its way down the thigh and opened out as low as the upper part of the middle third. The diagnostic value of the place of opening has been discussed. (See Sinuses.)

Diagnosis.—We think the diagnosis can be made out from the foregoing statement of symptoms, and will only mention a few complaints for which it may be mistaken. These are rheumatism, a sprain, scia-

tica, periostitis affecting the trochanters, or necrosis of the pelvic bones affecting tuber ischii, or one of the rami, a large gluteal or psoas abscess. It might also, as I saw in one case, be mistaken for "spinal disease" or lateral curvature of the spine. Also, for inflammation of the bursæ of the psoas iliac muscle. It *might* also be mistaken for wasting of the limb, or dislocation. But the diseases for which it is probably most likely to be taken, are neuralgia or rheumatism of the knee, or other diseases affecting that joint, of a painful nature. But this mistake ought not to occur, and would not if too much stress were not laid on the "knee pain," to the exclusion of other valuable signs. It is only in the early part of the disease that there can be any valid excuse for not at once recognizing its character.

Prognosis.—Under the head of excision of the hip joint, I shall probably have more to say in regard to the recovery or fatal issue from the disease. Let it suffice to remark here, that during the first and early part of the second stage, recovery under proper treatment is by no means uncommon, but when suppuration has been established recovery may take place, and sometimes does, with bony anchylosis, but the majority result fatally, either directly or through the implication of some important organs. Of course, much depends on the constitution of the subject. If it be highly strumous, little but an unfavorable issue can be expected. If it has been excited by exterior causes in a good constitution, recovery with a stiff joint may take place.

Treatment.—In the inception of this disease, we have simply an inflammation to treat, and this should be done the same as an inflammation in any other joint. The advantages of early treatment, properly directed, cannot be over estimated. The first sign of dragging the limb, or of limping, with pain in the hip, or at the knee, should awaken sufficient suspicion in the attending physician to cause him to institute a careful examination of the hip. The *pain*, *attitude*, and *gait* should receive special attention, and all collateral evidence should be gathered that could have any bearing on the diagnosis.

As we have simply inflammatory action to combat, it should be taken well in hand. One point in the treatment of an inflamed joint cannot be too early, and for a reasonable length of time, strenuously enforced, viz., *rest*. Every movement causes friction of the diseased surface, and thus increases the morbid action. In small children this is, of course, difficult to carry out for a sufficient time, yet success seems to lay in this plan only, for all other means can only be secondary to it. A vast number of apparatus have been invented for this purpose, many of which have serious objections. To fix the joint immovably requires the fixation of the pelvis as well as the limb. Among those used are the double inclined plane, Dr. Sayles and H. G. Davis' apparatus, Dr. Barwell's wire gauze apparatus,* the strait splint, and many modifications of these. I know of nothing that would serve more completely and satisfactorily to fill all the indications than a sufficiently large piece of gutta percha, well moulded to the thigh, hip and half the pelvis, well secured by proper bandages, and extension kept up until it becomes firmly set to the parts. If needed, a piece can be removed from over the trochanter to prevent pressure over the joint. A thick leather, well adapted, answers very well.

On the point of securing *rest* there is no division among authorities. From the time Dr. Physic proposed and carried out this plan, down to the latest authority, all are agreed upon it. Its necessity is imperative. Yet it is not as well carried out as our better judgment and experience teaches us. The importunings of the child, parents and friends for the privilege of moving about, are too apt to be entertained and granted. *It is* harrowing to the feelings to confine a little one to the couch in one position, or nearly so, for a series of weeks or months, yet *necessity* seems to demand it, for to retain quietude for a few days, and then allow motion, avails nothing. It must be continued, whether the time be long or short, until all tenderness at the hip, and pain at the knee have disappeared completely, and also until there is no limping or shuffling when an attempt to walk is granted. The inflammation, of course, may be acute, or subacute in type, or run a chronic course from the outset, and treatment of the first stage must be modified accordingly.

The *medical treatment* of these cases will be modified to suit each case, according as it is acute, subacute, or chronic, as well as to the primary seat of the disease, whether

* Barwell on Diseased Joints.

it be synovitic or attack the soft tissues of the joint, the head of the femur, or cotyloid cavity. These can frequently be determined from the first. The nature of the constitution must also be duly weighed. The acute and synovitic forms must be actively treated with rest, extension by weight and pulley, or other apparatus that does not prevent easy access to the hip. The surface all around the joint should be blistered with cantharidal vesicant, or cerate, or with strong tincture of iodine, the latter being frequently and freely applied. The secretions should be kept in the best possible order, and the strength of the patient upheld by tonics, and good, wholesome food from the beginning.

Of course, various remedies are applicable in different cases, and will be modified also according to the cause producing the disease. The cause usually charged is a scrofulous or tubercular diathesis. While this no doubt lies at the bottom of many of these cases, as a cause, yet I do not believe it to be so in the majority of cases. The opinion has long been taught, and still is so by the greater number of writers; but it is now losing ground with those who are strict observers. The cause is now well known to be frequently traumatic in character; and it is equally well established that an ordinary inflammation of a joint which has not been self-limited, nor controlled by therapeutic agents, may go on to the formation of pus within the joint, followed by abscess and fistulous opening, and pass through all the stages characterizing tubercular or scrofulous disease of the joint.

This I have seen in other joints than the hip, in more than one instance, and have at this time a case under treatment, of caries of the bones forming the ankle-joint, caused by an injury received months ago. He had always been healthy, and neither he nor his antecedents have ever manifested any scrofulous symptoms. I have seen the same with the knee, in at least two instances. If such can occur in the knee, why not in the hip also? This ground is well taken both by Barwell and Beaux.

Cases of this description, however, are far more liable to recover than those where the tubercular diathesis is well marked. I think, also, that in scrofulous subjects, where an injury to the joint occurs, that it is more liable to be developed into a carious or necrosed condition than in those not so constituted. Seeing, then, the great difference in the constitutional status in different cases, all the evidence having any bearing in either direction should be well brought out in the investigation of each case in hand as it comes up.

In those not scrofulous, those measures should be used that come into play in treating a simple inflammation of the joint, and these will generally succeed; but if they should not, and the disease go on to suppuration, there will remain but little difference in the general plan of treatment, whether the subject be scrofulous or not.

If, however, the case be clearly scrofulous, then greater care, if possible, will be demanded, and a less favorable result must be anticipated. In this form, tonics and alteratives, as iodide of iron, or other form of iron, and iodide of potassium, generally, with alterative topical applications, should be well used. Good nourishment and hygienic measures should be adopted. If such measures fail, and the disease go on to suppuration, still similar measures will be found valuable; but when it is known where the pus is seeking exit, it should be poulticed at that point, and opened early.

One measure, not before mentioned, I think would be of great service in those cases where there is a strong tendency to the formation of pus, but where it has not yet been formed, and the capsule is greatly distended, and liable to burst. This is always so in the latter part of the second stage, *i. e.*, with reference to distension, and often in the first. That measure is articular paracentesis, performed with a very fine trochar and canula, or with a grooved needle, being always careful to admit no air. This means would relieve distension, by lessening the amount of fluid in the joint, and by this means afford great relief to the patient, and also remove that which is by its large quantity irritating the already diseased surfaces by its mechanical distension. This measure is better adapted to the synovitic than the osteitic form of the disease.

After sinuses have formed, the chief indications are to afford as much relief from pain as possible with anodynes. Support the system, maintain rest of the joint, and keep the whole economy in the best order possible under the existing condition, and this with a view to effecting recovery by bony anchylosis in the shortest time it can

be accomplished, and in the best possible shape.

If, after fair trial of all the proper means, recovery seems not likely to occur, then the question of *excision* becomes one of vital and practical importance. This question I propose to consider in a separate paper.

I have not so much attempted to give in full the treatment of this disease as I have to give the diagnostic symptoms and signs by which it may be recognized. The treatment is quite fully explained in all leading text-books on surgery of the present day, hence a fuller exposition is not necessary here.

CONGENITAL CYST OF THE NECK; OR THE "HYGROMATOUS CYST" OF VON AMMON.

By William R. McMahon, M. D.,

Of Huntingburgh, Indiana.

I was called, on August 28th, 1870, to see the infant daughter of Aaron Utz, four days old. I found, on arriving, a well developed and bright looking child, with the front part of its neck completely occupied by a morbid accumulation, which reached from the lower part of the lobule of the left ear to within half an inch of the right ear. This tumor, with the head in the erect posture, completely filled the space between the upper part of the sternum and chin, projecting in front of the chin about one inch. The external boundaries were well defined. The skin covering the cyst was of normal color, with the exception of a few ramifications of small and tortuous blood-vessels.

I could not detect any fluctuation, yet with a properly adjusted light in a dark room it was semi-translucent. To complete my diagnosis of the nature of its contents and the coverings of its external wall, I introduced an exploring needle, and found that its anterior wall was *only* covered by the integument, superficial fascia, platysma-myoides, and from the puncture oozed a limpid serum.

My diagnosis being made, I advised no active interference until the child grew older and stronger. I heard nothing more of the case for one month. On my second visit I found the cyst much larger; respiration imperfectly performed. The skin covering the cyst was now of a bluish tint, yet there was no œdema of the face or head. Fearing that active measures were yet premature, I simply made an incision at the most pendant part, in order to palliate the symptoms. This was successful.

On the 20th of November, 1870, I again visited the little patient, and found that the cyst was much larger than on my previous visit, and that deglutition and respiration were seriously impaired, with symptoms of passive congestion of the head and face. This condition of the patient demanded, if possible, something to produce a radical cure, for which I used a seton composed of two strands of surgeon's silk, which were passed from one extremity of the cyst to the other, entirely encompassing the anterior surface of the neck. From the entrance and exit of the needle there escaped a serous liquid for the first forty-eight hours, which reduced the size of the cyst so much that it seemed to be nothing but a redundancy of tissue.

On the third day there seemed to be no inflammatory action whatever, so I saturated the seton with tincture of iodine, and drew the saturated portion within the cyst. This was repeated each successive day, for ten days, at the end of which time there was quite a purulent discharge, and sufficient inflammation to demand the withdrawal of the seton, which was done. Suppuration continued for several days, and then ceased. From the time of the introduction of the seton until the close of treatment, external pressure was kept up, commensurate with the comfort of the child. After suppuration ceased, and all inflammatory action, the obliteration of the cyst was perfect, and the only mark left to designate the site of this formidable hygromatous cyst was simply a slight redundancy of tissue. During the entire treatment there was scarcely any febrile excitement or constitutional disturbance. This cyst was evidently a unilocular one, and the simple seton, in my opinion, in this case would not have produced sufficient inflammation to have affected the agglutination of cyst walls, which was perfectly accomplished by the combined action of seton and iodine, and yet perfectly under my control, which would not have been the case had I resorted to more powerful means, by injecting the cavity.

Medical Societies.

The Michigan State Medical Society.

The Michigan State Medical Society met for its annual session in Grand Rapids, June 12. Although the first meeting in the annual session, the attendance of members of the Society was large, there being nearly one hundred physicians present.

The meeting was called to order by the President, Dr. H. O. Hitchcock, of Kalamazoo, Dr. Lenora Foster, of Otsego, First Vice President, occupying a chair at his right hand. Dr. George E. Ranney, of Lansing, Secretary, and Dr. H. B. Baker, of Lansing, Treasurer, were present.

A communication from the State Homœopathic Medical Society, asking the co-operation of the State Medical Society in securing stringent laws for the prevention and punishment of the terrible crime of infanticide, was referred to Drs. Kedzie, Palmer and Chittock, who reported in substance that the State Medical Society had always condemned fœticide, considering it a crime against God and society, and a shame on our civilization; that, in the opinion of the Society, if the laws now on our statute books be enforced, they are sufficient; that the remedy lies more in portraying the frightful results of such a crime than in legal enactments; and that the State Society welcomes any and all bodies of men who desire to blot out such a crime.

Three ladies, proposed for membership, were elected—Miss Frances A. Rutherford, of this city; Miss Sibelia F. Baker, Coldwater, and Miss Ruth C. Gerry, of Ypsilanti. They are the first female practitioners ever admitted to the State Society.

The Committee on the Detroit Medical College was then called for. Dr. White then read the report, the substance of which was, that the school is in good working order, in flourishing condition, and the lectures are excellent.

Dr. Ranney read the report of the Committee on Finance, which shows the finances of the Society to be in a most satisfactory state, there being a considerable surplus of funds on hand.

A communication from the Association of Medical Superintendents of American Institutions for the Insane was read, and the resolution recommended by it was adopted, to the effect that courses of lectures on the subject of insanity should be delivered in every medical college, and that no students be allowed to graduate without a thorough examination on the subject.

Dr. Parmenter introduced a motion, which was carried, asking for a committee of three to report at the next meeting a form of law regulating medical practice, to be urged for passage by the Legislature.

The election of officers resulted as follows:

President—Professor A. B. Palmer, M. D., Ann Arbor.

Vice Presidents—Drs. J. F. Noyes, Detroit; John B. White, Saginaw City; Wm. Parmenter, Vermontville, and E. Amsden, ——.

Recording Secretary—Dr. George E. Ranney, Lansing.

Corresponding Secretary—Dr. H. B. Baker, Lansing.

Treasurer—Dr. Gordon Chittock, Jackson.

Dr. Axford, of Flint, claimed that he had cured two cases of genuine hydrophobia, detailing his experience and the remedies used—opium or morphia, by means of hypodermic injections, followed by large doses of castor—asking members of the Society to test the remedies. Others followed, discussing the subject of rabies, briefly detailing their experiences and deductions.

The next meeting will be held at Saginaw City, the second Wednesday in June, 1873.

Military Tract (Illinois) Medical Association.

At a meeting of the Military Tract Medical Association, held in Galesburg, June 11, 1872, the following resolutions, offered by Dr. W. L. Cuthbert, were unanimously adopted:—

Whereas, The procuring of criminal abortion is becoming more prevalent, and in our vicinity, as elsewhere, unscrupulous specimens of human depravity—abortionists—are plying their murderous traffic; and that from the members of the medical profession the public expect an expression of their opinion in regard to this evil; therefore,

Resolved, That we recognize the procuring of miscarriage or abortion in any stage of pregnancy as criminal in the highest degree, unless absolutely demanded to save human life, and then only by the advice of two or more regular physicians.

Resolved, That we, as physicians, pledge all our efforts to assist and sustain our legislators and executives in all measures that tend to the suppression and prevention of this heinous crime, with its fearful consequences.

Resolved, That we are bound by a sense of duty as physicians and citizens to condemn the abortionist and his abettors, deeming them unworthy of our association and respect; and to use all reasonable means to expose their murderous schemes and bring them to punishment.

Resolved, That while we denounce their murderous traffic we will strive to inform the public of its train of consequences; for the violation of physical and moral laws is certain to meet its just penalty, prolonged and intractable diseases of body and mind, and often death.

Editorial Department.

Periscope.

The Pathology of Bright's Disease.

A paper of deep research was read before the Royal Medical and Chirurgical Society of London, on this topic, by Sir William Gull and Dr. Henry G. Sutton. An epitome of it is given in the *British Medical Journal.*

The microscopic appearances observed in granular contracted kidney were given in detail, and their conclusions on this point were, that the visible morbid changes in granular contracted kidneys were due to the primary formation of a fibroid or hyalin-fibroid substance in the intertubular parts, including the vessels, and to atrophy of the tubular and intratubular structures of the kidney. On this point the authors confirmed the observations of Dr. Dickinson and other observers. And they further stated that this formation commenced in different parts of the kidney, commonly near the surface; but it also seemed to commence in the outer coats of the arterioles, and in the walls of the capillary vessels. From these parts it extended round the convoluted tubes and Malpighian bodies. This fibroid or hyalin-fibroid substance subsequently contracted and drew the Malpighian bodies together, compressed the urinary tubules and vessels, and might entirely obliterate them. This thickening of the capillary walls, and the diminished calibre of some of the arterioles, must naturally interfere with the nutrition of the tissues and tend to produce atrophy; and the reduction of the blood-supply to the secreting cells probably caused diminished secretory function and atrophy from diminished use. The alteration in the renal epithelium, when great, was the result of the atrophy; and its slighter changes, such as granular appearance and desquamation of some of its cells, were not peculiar to granular disease of the kidney, such slighter changes being even consequent on the process of dying.

The morbid changes in the vascular system were next considered. Dr. Bright and subsequent observers had recognized that atheromatous arterial disease was common with granular contracted kidney. In 1852 Dr. George Johnson, in his work on kidney disease, stated that the minute renal arteries were much thickened in chronic Bright's disease, owing to hypertrophy of the muscular coats of the vessels. A few years ago the same writer pointed out that the arterioles, not only in the kidney, but in the skin and other parts of the body, were thickened, and their muscular coat hypertrophied, in chronic Bright's disease. Sir William Gull and Dr. Sutton described at considerable length the changes that they had found in the minute arteries and capillaries of the kidneys, pia mater, and other parts, and they stated that their observations showed that the minute arteries and capillaries were thickened in chronic Bright's disease, and they "gladly acknowledged the debt the science of medicine owed to Dr. George Johnson for distinctly insisting upon this fact. The microscopical observations of Sir William Gull and Dr. Sutton showed that the arterioles and capillaries were more or less altered in chronic Bright's disease. This alteration was due to a hyalin-fibroid formation in the walls of the minute arteries, and hyalin-granular change in the corresponding capillaries. This formation occurred chiefly outside the muscular layer; it also occurred, but to a less extent, in the tunica intima of some of the arterioles. The degree in which the affected vessels were altered, and the extent to which the morbid change was diffused over the vascular system of the different organs, varied very much in different cases. The muscular layer of the affected vessel was often atrophied in a variable degree. Some pathologists might consider that the perivascular canals were the seat of these hyalin-fibroid changes. On the existence of such canals they expressed no opinion; they asserted only that the morbid changes were chiefly outside the muscular layer of the arterioles. The arterio-capillary changes observed in chronic Bright's disease were not seen in the vessels of healthy persons who had been accidentally killed, or who had died of phthisis and of other diseases not allied to chronic Bright's disease.

The condition inducing the vascular change was next considered. Dr. George Johnson had stated that the general arterial thickening was due to muscular hypertrophy. He considered that the blood was impure in consequence of the kidney-disease, and that the arterioles resisted the passage of this impure, more or less noxious blood, and in doing this they became hypertrophied. The left ventricle of the heart, therefore, made an increased effort to drive on the impure blood, and the result of this antagonism of forces was that the muscular walls of the arteries and those of the left ventricle of the heart became in an equal degree hypertrophied. This theory Sir William Gull and Dr. Sutton did not accept, for their observations showed that arterial changes were not dependent on muscular hypertrophy, but on hyalin-fibroid formation. They had found the heart and vessels healthy in cases of chronic disease of the kidneys, and, further, their inquiries showed that the cardiac and vascular changes might occur independently of renal disease.

Cases given in the appendix to this paper

were next alluded to, to show that there was a general morbid state in which the kidneys might be contracted, the heart hypertrophied, and the minute arteries and capillaries altered by a hyalin-fibroid formation. The kidney-changes were most often, but by no means always, part and parcel of this morbid state, and their absence showed that the renal changes were not an essential and indispensable part of the general process; but as the vascular system was at some part affected with this hyalin-fibroid change in all the cases, therefore they concluded that the vascular disease was to be regarded as the constant and essential part of this morbid state.

The pathology of this hypertrophy of the left ventricle was next considered. Bright considered that the quality of the blood was altered by the kidney-disease, and that the heart, in consequence, had to contract with greater power to force the morbid blood through the vascular system, and became hypertrophied in order to accomplish this. Many pathologists had adopted Bright's explanation. Dr. Wells, in 1853, suggested that the hypertrophy might be dependent on atheromatous changes in the vessels. Against the explanation offered by Bright and others, the authors stated that the frequent association of cardiac hypertrophy and renal disease did not prove that there was a casual relation between these two morbid states. Moreover, in many cases where there was chronic disease of the kidneys, and the blood therefore presumably impure, the heart was not hypertrophied; as in cases of large white, lardaceous and scrofulous kidneys, as well as some cases of granular contracted kidneys. Dr. Johnson had endeavored to account for the absence of the hypertrophy in such cases, by assuming that the muscle of the heart was imperfectly nourished. The authors stated that this might explain a dilatation disproportionate to the hypertrophy, but it did not explain how a heart of normal size acquired additional force requisite to overcome the supposed obstruction. Evidence was next brought forward to show that the cardiac hypertrophy was induced by the morbid changes referred to in the vascular system, the heart being found hypertrophied in all the cases in which the vessels were much and generally thickened by hyalin-fibroid change—slightly hypertrophied where the vessels were little thickened, and greatly hypertrophied where the vessels were much thickened, although there might be little or no kidney disease. The hyalin-fibroid change was assumed to impair the elasticity of the vessels, thus imposing upon the left ventricle a necessity to contract with greater force to carry on the circulation. The other conditions which made up the morbid state known as chronic Bright's disease were next noticed, namely, vesicular emphysema, retinitis albuminurica, atrophied brain, contracted spleen, and morbid changes in the intertubular parts of the stomach. In all these conditions, the arterioles were more or less thickened by fibroid or hyalin-fibroid changes. This general morbid state belonged principally to the period of life at or after forty years of age; and after forty its frequency greatly increased as age advanced. The kidneys, even in children, or in other young persons under adult age, were sometimes much contracted, and death caused by uræmic poisoning, without the cardio-vascular changes alluded to. But the general hyalin-fibroid change in the vessels might occur in early life; and, in proof, the case of a girl aged nine years was mentioned, where the kidneys were granular and very contracted, the heart hypertrophied, and there were hyalin-fibroid changes in the arterioles of the pia mater. In the state known as chronic Bright's disease with contracted kidney, the morbid changes described did not arise in a constant order. In some cases the changes seemed to commence in the kidneys or in the heart, sometimes in the lungs or in the brain, or in other organs; hence the symptoms of the disease varied very much in different cases. In all cases, whether many or few organs were affected, the minute arteries and capillaries were altered by hyalin-fibroid formation, attended with atrophy of the adjacent textures. The authors could not regard the functional disturbances which occur in many organs during chronic Bright's disease with contracted kidney as dependent on blood changes only or chiefly, as, for instance, pain in the head, discomfort after food, palpitation, dry skin, epistaxis, etc. These were probably due not so much to changes in the blood as to changes in the tissues themselves.

The conclusions arrived at in the paper were briefly as follows: 1. There is a diseased state characterized by hyalin-fibroid formation in the arterioles and capillaries. 2. This morbid change is attended with atrophy of the adjacent tissues. 3. It is probable that this morbid change commonly begins in the kidney, but there is evidence of its beginning primarily in other organs. 4. The contraction and atrophy of the kidney are but part and parcel of the general morbid change. 5. The kidneys may be but little, if at all, affected, whilst the morbid change is far advanced in other organs. 6. This morbid change in the arterioles and capillaries is the primary and essential condition of the morbid state called chronic Bright's disease with contracted kidney. 7. The clinical history varies according to the organs primarily and chiefly affected. 8. In the present state of our knowledge we cannot refer the vascular changes to an antecedent change in the blood due to defective renal excretion. 9. The kidneys may undergo extreme degenerative changes without being attended by the cardio-vascular and other lesions characteristic of the condition known as chronic Bright's disease. 10. The morbid state under discussion is allied with the conditions of old age, and its area may be said hypothetically to correspond to the *area vasculosa*. 11. The changes, though allied with senile alterations, are probably due to distinct causes not yet ascertained.

On Atrophy of the Heart.

In a lecture published in the *British Medical Journal*, Dr. THOMAS SHAPTER says:—

An impulse, feeble and very limited in extent, sometimes exists, with an evidently very deficient area of percussion dullness, both superficial and deep, and this evidently without any emphysema or other cause to interfere with the correctly ascertaining that the size of the heart is abnormally diminished. The cardiac sounds are everywhere at a minimum; but, if heard, may be a little sharper in tone than natural; the pulse is small and deficient in force. This state of things indicates a condition of muscular atrophy. If there be frequency and some palpitation in the heart's action, it is probably due to the atrophy being caused by, or associated with, a generally depraved condition of the blood, as in tubercular degenerations or carcinoma. In these cases the heart is not only diminished in size, but its fibres are degenerated, being pale, soft, and deficient in firmness. This may be simply caused by an anæmic state of the viscus, but it is more commonly due to a fatty degeneration of the fibres, and which is evidenced, not by the deposit of separate fatty masses, but by the heart exhibiting both on its external and internal surfaces the appearance of buffy spots; and, as Dr. Quain summarily states "paleness, softness, peculiar mottling, and friability of texture." This fatty degeneration not only causes weakness, by its metamorphosis of fibre into fat, but may also, in some rare instances, cause diminution in bulk.

This state of atrophy may be simple, as seen in phthisis and carcinoma, or in diseases where there is a general wasting of the muscular structure of the body; or it may be due to the specific wasting associated with pericardial adhesions, occurring not infrequently after the acute form of pericarditis; or it may be due to the specific metamorphosis of the fibres. These conditions of the heart, now weakened in power, and diminished in bulk, offer important and fatal indications.

It is not easy in these several cases of anæmia, of simple muscular atrophy, or of fatty metamorphosis, to discriminate one from the other solely by the physical phenomena exhibited by the heart. We must seek to determine the precise form of affection rather from the general symptoms; but these, with their etiology, had better be referred to when considering the morbid states of the heart, in the category of structural diseases next to be described, which comprises the morbid structural changes specified above, but unaccompanied by any diminution in the heart's bulk.

This category includes the very important range of cases, as regards diagnosis, in which the heart, though the impulse be feeble, is not enlarged nor involved in any surrounding or contiguous dullness, in which the indications are that the heart, though weak, is, in fact, of the normal size. These cases may be due to structural, or only to purely dynamic, causes. Between these two classes of cases it will be well to discriminate, and then to find out in the latter where we may anticipate neither danger nor cause for alarm; *i. e.*, the existence of a normal condition, or of functional debility only. The character of the impulse, when the heart is feeble and small in size, has just been described. Should this character be well marked, though there be no indications of a want of proper bulk, and there be, in addition, an impulse always reduced in strength, and only very rarely exhibiting a visible *ictus*, and this rather having the appearance of an undulation than of a beat; while the sounds, the first being sharp and flapping, the second very thin, are generally very weak and toneless, and entirely free from any complication of murmur; with a pulse irregular in force or rhythm, but for the most part slow, we may surmise there is muscular weakness. Should the pulse be rather fast than otherwise, this weakness is then probably due to a state of anæmia. If, under these circumstances, the impulse of the heart, though generally feeble, be occasionally characterized by a forcible beat, it is very probable these conditions are associated with a concentric hypertrophy of weakened tissue. Should we, however, find these specific indications of muscular or anæmic weakness greatly exaggerated, so that there is a variable impulse, always feeble, but with the character of a fluttering unsteadiness, indicative of great variability both in force and rhythm, at times even jerking and abrupt, and with the heart, as it were, largely projected forwards; the first sound flapping, short, weak, and toneless, and then obtuse and dull; the second weak and thin, no murmur, no jugular pulsation; the pulse at the same time weak and irregular, with loss of power, and little or no tendency to general or local arterial or venous congestion; if with all these the apex-beat, though difficult to define, be yet more distinct than in the cases of muscular or anæmic weakness, we may infer the presence of debility from fatty metamorphosis.

The general symptoms characterizing the two categories of disease above referred to, viz., debility of impulse, with diminished or with normal size, are those of physical weakness and easily induced breathlessness. In muscular atrophy the feeling of weakness is immediately experienced on the exercise of any undue exertion; and the patient, for the most part, shows a disinclination to submit himself to the test. In anæmia there is a more general depression of vital force, and the breathlessness is more marked and more persistent than in simple muscular weakness. It is essentially a disease of young life, and associated with the nervous and hysterical temperaments, and is met with more commonly in females than in males. By far the greater proportion, however, of these cases of weak impulse are due to a fatty degeneration or metamorpho-

sis of the muscular fibres; and this, unlike that of anæmia, is rather a disease of males than of females, and in them occurring at a more advanced period of life, being rarely met with in those under forty years of age. It is less a disease of the laboring classes than of the well-fed. This, probably, is to be explained by the heart in the former, if predisposed to this form of degeneration, early taking on the character of hypertrophy or dilatation; but in whatever class it may occur there will be found associated with it a pale, flabby skin, indicative of the constitutional tendency. When a state of fatty metamorphosis of the heart exists, the countenance is usually pale and sallow; sometimes the lips are livid, generally deficient in the natural color; the tissues are soft, the manner is languid, the temper is apt to be dejected, and there is a sadness and melancholy foreboding not commonly met with in many other affections of the heart; muscular power is deficient and soon exhausted, and the effort to exertion is not very promptly aroused; there is evidently a depression of vital force; the appetite is feeble, digestion is weak and flatulent. In advanced cases there is marked uneasiness across the loins, and the feet and ankles show slight œdema; cardiac uneasiness, at times passing into pain, often supervenes, with occasional sensations of a palpitation, or rather flutter; and if this increase, often accompanied by a choking feeling, somewhat of the nature of a globus hystericus. The respiration is irregular, often hurried, and frequently sighing. When the right ventricle is prominently the seat of weakness, the respiration may present peculiar characters, as described by Dr. Cheyne (*Dublin Hospital Reports*, vol. ii, p. 217), in which a protracted period of apnœa is slowly recovered from to be followed by a few hurried respirations. The apnœa, as shown by Dr. Reid, is associated with an increased cardiac action, as evidenced by acceleration of the pulse, followed by remissions during the hurry of the breathing. In the case described by Dr. Cheyne, the several phenomena occupied about a minute, and occurred in a case of advanced disease. It is probably a symptom solely due to very advanced disease. In extreme cases the memory often is notably impaired; and mental efforts not only exhaust but induce irritability, and are not without risk to life. The tendency to feel faint becomes more marked, and is often accompanied with a distressing and alarming vertigo, and this vertigo sometimes heralds a more decided disturbance of the nervous system, so that something of the nature of a convulsion may take place. It does not present the features of an epileptic convulsion, but rather of a violent spasmodic struggle for life.

It has been advanced by Mr. Canton, that the appearance of the arcus senilis is concomitant with, and as such to be considered a symptom of, fatty metamorphosis of the heart. My own observation does not lead me to confirm this view. I have seen many cases of fatty degeneration where it has not occurred, while in many in which it has been strongly marked there has obviously not been the least tendency to a fatty metamorphosis.

It is obvious, from the nature of the symptoms, and the anatomical condition of the heart which produces them, that the prophylactic management of these cases mainly consists in quiet, in the avoidance of all excitement, bodily and mental, while the system generally is sought to be improved and invigorated by fresh air and a generous diet.

The medical treatment, as indicated by the evident feebleness of the general system, and of the heart in particular, finds employment in light preparations of iron, in antispasmodics, and stimulants; the occasional use of mineral acids with digitalis is often most beneficial; and, at times, sedatives, in the forms of opium, hyoscyamus, hydrocyanic acid, and chloroform, are useful. The associated attacks of vertigo or faintness must be met by the stronger restoratives of æther, ammonia, or brandy.

On Fracture of the Femur.

Dr. F. D. Lente, of Cold Springs, N. Y., says on this topic, in the New York *Medical Journal*, March, 1872:—Within the last two years a very important modification of the treatment of fractured femur has been introduced, the advantages of which, in *simple fracture*, have been most prominently set forth by Professor Sands and Dr. Bryant. Both speak in the highest terms of the success of the "plaster-of Paris splint," and present incontestable evidence of its excellence, in the statistics which they publish. The application of the plaster-bandage, however, and the preliminary arrangement of the patient as described, though sufficiently simple for those engaged in the constant use of surgical appliances, will, no doubt, appear more troublesome and complicated to the general practitioner, who is in the habit of treating only occasional cases of fracture, than the apparatus of Buck, in the application of which the merest tyro in surgery can scarcely fail to succeed, and which, with any decent degree of watchfulness and skill on the part of the surgeon, leaves little else to be desired in the majority of cases. Still, the plaster-splint, in its application to the *femur*, as in other applications, has a certain attractiveness, which will lead many surgeons to adopt it; and, in certain cases, where exercise and fresh air are of special importance, and where the conveyance of the patient from one locality to another is necessary, will undoubtedly prove superior to all others.

I would suggest that the patient be placed on a long table, or on a broad board of sufficient length placed on a table;* that three

* He may, if more convenient, be laid on a single bedstead without a foot-board, or a "bunk" made for the occasion.

layers of old blanket, or an equivalent of flannel, be placed on the injured side, between the genitals and thigh (not over the *perinæum*, which is entirely out of the way), extending down several inches upon the latter; that over this be placed the counter-extending band, consisting, as most readily accessible, of a strip of strong, unbleached muslin about six inches wide, folded twice upon itself longitudinally, and long enough to pass above and below the body to above the shoulder, where it may be tied in a knot. This is to be secured either to the upper end of the table or board, as the case may be, or attached to a cord and fastened to a staple in the wall, or some such fixture which may happen to present itself. The limb having now been drawn out to its proper length, as ascertained *by actual measurement*, is to be protected by carrying a flannel roller from the toes to the groin, and around the pelvis. Before carrying it about the latter, this must be raised a few inches from the table. To do this conveniently, carry a band folded like the counter-extending one, but wider, around the pelvis, just above the greater trochanter; tie in a knot about eighteen inches above the body, pass a stick under it, by means of which an assistant, standing on the table astride the pelvis, may easily raise it to any required height. If it be preferred, or in case the table is not sufficiently firm to bear the weight of an additional person, the body may be raised, and kept at a convenient height by a simple mechanical contrivance always at hand. Place a piece of board four or five inches wide, and long enough to reach a couple of feet or so above the table, so that one end will rest on the floor on a line with the pelvis, and at a distance of a foot or so from the table, to be held temporarily by an assistant; place a similar piece with one end resting on the upper extremity of the first; this is to be used as a lever for raising the body from the table; and the pelvic band must be so attached to it that, when it is raised to a parallelism with the table, the pelvis shall be at a convenient height above the latter, which need not exceed a few inches. To maintain the lever in this position, place under its extremity a vertical prop similar to the first-described piece. The pelvis *will then be* swung clear of the table, as upon a gallows. Extension may now be made.

If weights be used, the extending cord may pass over the top of a chair-back, the chair being kept firm by a suitable weight on its seat. If adhesive plaster be used for extension, each band opposite the *malleoli* had better be folded upon itself longitudinally, so as to make it as narrow as possible, in order that it may interfere as little as possible with the proper covering of the foot by the turns of the roller. It is stated that only modeler's plaster should be used; but this is seldom to be procured in small villages and in the country; it is therefore well to know that *any fresh* plaster-of-Paris will answer, though the coarser variety may be longer in "setting," which process generally requires at least half an hour, and from one to two hours to become perfectly hard and dry.

Case of Uterine Tetanus.

An example of this uncommon accident is reported by Dr. J. TRUSH, in the Cincinnati *Medical Repertory*:—

On the 4th of October came into the lying-in-department of Prof. Carl Braun, a woman aged 35 years, at the full term of her seventh pregnancy. Three days later labor set in; the attending midwife examined the patient, found the presentation somewhat abnormal—the head and one hand presenting—and at once reported this to the professor's assistant, adding that the membranes were intact, and the pains light. The assistant, being on his usual morning rounds through the wards, did not consider the case of sufficient urgency to forbid finishing the visit, and hence proceeded. In a few minutes, however, the midwife returned with the statement that, during her absence, rupture of the membranes had taken place—said to have been occasioned through examination by some enterprising student—and that now the right shoulder was the only presenting part, the head having passed up into the left iliac region, the back being anterior, towards abdomen of mother. The assistant now lost no time, but repaired at once to the bedside of the patient, found the position of the child as reported, and in addition that the uterus was in a state of tetanic contraction, so that turning without chloroform was not to be thought of. The patient was, therefore, placed thoroughly under the influence of this anæsthetic, with the effect of producing a very slight relaxation of the uterus, barely sufficient to enable the operator, after a protracted effort, to get hold of a foot; in bringing this down into the vagina, the arm corresponding to the presenting shoulder and the cord also followed. Traction, strong traction was now made from the foot, while the shoulder and head were pushed upward with the expectation of being able to complete the version, but all to no purpose, the uterus held its contents with a grip of iron. By this time, too, the pulsations in the prolapsed cord had ceased, the child was dead.

Not deeming it prudent to institute further operative procedure without first informing Prof. Braun of the state of affairs, this gentleman, on being informed, said that he would look after the patient himself. In an hour or so he came, found uterus as firmly contracted as ever, and conditions in other respects as described. He expressed the opinion that decapitation of the child was the safest and quickest method of relieving the mother. This operation he expected to execute in the following manner: he would introduce his left hand into the vagina, push thumb and one or more fingers onward into the uterus, grasp the child's neck, and, under guard of the fingers, apply the decapi-

tating hook—Stumpfer Schlusselhacken—to the neck, luxate the spine, and twist off the soft parts; extract the child's body and last its head.

The patient was now again chloroformed. Before resorting to the hook, however, the Professor tried to complete the version, but with no better success than his assistant; he therefore proceeded to operate as above indicated. He introduced his left hand, tried to get hold of the child's neck, but failed; six or eight times he repeated the attempt with a like result. The child's head was pressed so firmly upon its chest that the hand could not pass between them up to the neck, which latter was curved upward and forward against the abdominal parietes of the mother. What was to be done? The mother must be delivered somehow or other. Perhaps if the arm and cord were not in the vagina, the proposed operation might yet be possible. These parts, therefore, were removed, the arm with shoulder, by means of the decapitating hook. This operation also opened the thorax of the child. Once more a strong pull was made from the presenting foot, conjoined with external manipulations, and see, the breech of the child moves downward, and is brought into the world in a few seconds; but the head will not follow, it is still a prisoner in the uterine cavity, the outlet of which can be felt encircling the neck of the child like an elastic cord. However, after a pause of some ten minutes, the Professor succeeded in delivering the head also. The placenta followed in a few minutes. The whole operation had lasted upwards of an hour, perhaps an hour and a half, during which time the patient had been constantly, most of the time profoundly, under the influence of chloroform.

Treatment of Otorrhea.

Professor SEELY, of Cincinnati, says, in *The Clinic*:—

As regards the treatment of otorrhea, both in children and grown persons, the chief desideratum is the thorough cleansing of the ear.

Syringing is by no means always sufficient, in fact many times seems to be *absolutely injurious*. The secretion can be blown out by inflation either by the catheter or by Politzer's method, or washed through the Eustachian tube into the throat, by filling the ear with water and making pressure on the tragus, or washed the other way by passing the water through the meatus, inflating at the same time that the patient swallows, while the head is inclined at the same time far to the diseased side. The use of the probe and cotton will be found of great service also, especially when the parts need to be dry for the application of remedies, as in polypus and polyposed conditions of the membrana tympani.

While all the astringents are used for otorrhea, I would especially recommend zinc, both the sulphate and acetate, and nitrate of silver. My advice is always to begin with a weak solution (½ to 3 grs. ad. f.℥j. twice or three times daily), not only because it is often sufficient, but because a stronger solution may cause pain and thus terrify the patient, and prevent further applications, and also actually do harm instead of good, if not preceded by a weak solution to accustom the parts to the contact. I need not say that frequently it will be necessary to change from one astringent to another.

We have in otorrhea a larger or smaller perforation of the membrana tympani, the purulent fluid coming from the middle ear. Certainly neither parent, nor doctor, in his right mind, would allow such a stinking discharge to run on from any other part of the body, and in a purely sanitary point of view, its neglect is beyond comprehension.

Again, how can it be expected that the ear will become sound until the perforation or perforations (as they may be multiple) have healed, and of course the longer the discharge continues, the more difficult is it for this to occur. Every one should then put before him as the goal to be reached in the treatment of otorrheas in children, *the healing of the perforation.*

So great importance is attached to the soundness of the drum-head, that both many patients and not a few physicians, are unwilling to admit that there is a perforation.

Again, in cases of very great deafness with discharge, the reigning idea seems to be that the membrana tympani is *totally destroyed.*

While the membrana tympani is of very great value in an acoustic point of view, it also plays an all-important rôle in protecting parts of still more value, the soundness of the two fenestral membranes being of still greater importance. Bear these points in mind, and all the mystery of hearing with a perforated membrane, of very bad hearing with a very extensive loss of the membrane, capable of being made very good, will be solved.

If a perforation remains unhealed, the ear is left in an *unhealthy* condition and you can never tell when the disease may reappear. Then remember the membrana tympani in its tutaminal function, its *protecting* rôle, and endeavor to make it perfect.

Strangulated Hernia.

In a lecture on the above named subject, delivered at St. Bartholomew's Hospital, and published in the *British Medical Journal*, Sir James Paget remarked that in hospital and private practice together he had operated a hundred times for strangulated hernia, but that to obtain conclusions of real value it would need a tabulation of at least a thousand cases.

Generally speaking, in a case of hernia with signs of strangulation present, if reduction by ordinary means cannot be accomplished, an operation should at once be performed; in some cases, although the hernia is irreducible, the symptoms of strangulation are slight, obscure, or incomplete. It is an easy rule for all these cases

that you should operate when strangulation is suspected: this rule you must avoid, and learn the hard one, to discriminate the cases that require operation.

The irreducibility of the hernia is a fallacious sign of strangulation, and the presence of the other local signs, even in a marked degree, is not decisive of strangulation, and is not sufficient to prove the need of operating when the remoter signs are not present.

The local characters usually present in a strangulated hernia, and sometimes the remoter signs, may be imitated in an inflamed hernia, which is not strangulated. Generally, in the inflamed hernia, without strangulation, the local signs precede and greatly predominate over the remoter and general signs; while, in a hernia which is inflamed after becoming strangulated, the remoter and general signs will still predominate over the local, and the history will tell that they preceded. If these means of discrimination fail, you must operate if you cannot easily reduce the hernia; the risk of operating is small in comparison with that of waiting, for an inflamed and irreducible hernia may at any time become strangulated.

A hernia that has come down quickly, the more it exceeds its usual size the less is the probability of its being reduced without operation.

Again, the harder, more tense, and painful a hernia is, the less the chance of reduction without an operation.

Again, if the remote and general signs of hernia are present, and the hernia cannot be reduced, you must operate; or, if there be a swelling which may be a hernia, though it seem not likely to be a strangulated hernia, the operation must be performed at the seat of swelling.

If a patient have two herniæ that are irreducible, with signs of strangulation, and you cannot tell which is strangulated, you must operate on both.

One or more actions of the bowels, after symptoms of strangulation have set in, are of no weight against the propriety of operating; even frequent and regular action is not an absolute prohibition, as strangulation may involve only omentum, or only a part of the circumference of a portion of the intestine.

As a rule, while the bowels act you should not operate unless all the other signs of strangulation are well marked.

The sign we should most rely on as commanding the operation, is vomiting. The rule is safe that recent irreducibility and vomiting are enough to justify the operation, even though there be no other signs of strangulation present. While there are notable kinds of vomiting characteristic of strangulated hernia, we should not be misguided by waiting for any particular kind. Any kind of vomiting, if it be repeated, is enough to justify operation in a hernia recently become irreducible.

Cessation of vomiting in the extreme condition of strangulated hernia is a token of evil rather than of good, if general improvement do not coincide with it. The pulse is 80 or 90 in a majority of ordinary cases in the early stages, and becomes more rapid as the symptoms of strangulation become more marked; the respirations usually are in due proportion to the pulse.

The Antiseptic Treatment of Small-pox.

At a late meeting of the College of Physicians, of Ireland, Dr. GRIMSHAW said he had tried the antiseptic treatment in several forms of febrile disease, including scarlatina, typhus and typhoid, with comparatively unsatisfactory results. In small-pox he had followed this system of treatment in between thirty or forty cases. Twenty-three patients had sulpho-carbolate of iron. In ten of these, there was every reason to believe that they would have recovered naturally. Of the remaining thirteen, three died; two of these cases were of the purpuric type, and the third was confluent. In addition to antiseptics, Dr. Grimshaw used stimulants on some occasions freely. Much success attended the administration of perchloride of iron. Of the local affections of small-pox, the laryngeal complication was the most dangerous. It was best treated by moderate leeching, poulticing, the inhalation of steam, and cauterization of the fauces. Delirium was sometimes furious, and then physical restraint should be adopted as the most merciful plan of treatment. Purpura and hemorhage were not invariably fatal, though very often so. The most successful treatment consisted in the free employment of stimulants combined with turpentine and ergot of rye. Xylol had been given in another case with favorable termination. Confluent cases in vaccinated persons were not so formidable as many non-confluent cases in the unprotected, for in the former suppuration seldom took place.

Dr. Hayden had not been satisfied with the results of antiseptic measures: Being disappointed with sulphurous acid, he had fallen back on the tincture of the perchloride of iron. He considered that many cases proved fatal from asthenia, at the period of the commencement of secondary fever. In such instances, the heart would probably be found much altered. Delirium would be relieved by the application of a leech to each temple, and by the combination of twenty-grain doses of bromide of potassium with morphia in small quantities. Chloral had failed in his hands. Seventeen hemorrhagic cases had come under his observation; among them there were four recoveries, and in the latter the patients had been generally treated with perchloride of iron.

Dr. H. Kennedy spoke in favor of the antiseptic treatment. Among remedies of this class he would include food, stimulants, the mineral acids, and perchloride of iron. He thought the sulpho-carbolates were contraindicated in small-pox from their depressing effect. Sulphurous acid was an invaluable remedial agent. He employed it com-

bined with sulphuric acid and opium. Two cases of hemorrhage with purpuric spots had occurred in his private practice. Of these, one recovered. Hence great caution should be exercised in giving purgatives in small-pox, more particularly about the tenth or twelfth day of the disease, for absorption was promoted by depletive measures.

Mr. John Hughes alluded to the discrepancy in the definitions of confluent small-pox. The eruption should be generally confluent over the trunk as well as on the face and extremities, to constitute that form of the disease.

Dr. Lyons said that putrefactive changes rarely occurred in the living human body. The purulent formations in small-pox were not putrefactive. He regretted that the word "antiseptic" had been so loosely used in the discussion.

Dr. Gordon had employed sulpho-carbolate of sodium extensively in small-pox, and particularly in cerebral and pulmonary congestions. Two prominent symptoms showed themselves after the administration of some doses; namely, a marked diminution in the rate of the pulse, and a decided reduction of the temperature. In the throat-complication he placed most reliance on slight leeching, followed by the repeated application of poultices. Perchloride of iron was most valuable in purpuric and hemorrhagic cases.

On Circumscribed Inflammation of the Auditory Canal.

In a lecture on this subject, published in the New York *Medical Record*, February 1, 1872, Dr. D. B. St. John Roosa says:—

Circumscribed or furuncular inflammation of the external auditory canal is quite a common affection, and I imagine there are many more cases of this affection than is shown by the statistics of the writers on otology, inasmuch as it is not a serious affection in its consequences, and very often gets very little treatment. The subjective symptoms of a furuncular inflammation of the external auditory canal are pain and a sense of fullness in the ear. There is scarcely ever any *tinnitus aurium*, for the reason that the circumscribed swelling makes no pressure upon the membrana tympani and ossicula auditus, which pressure is usually the cause of the sounds in the ear described under the term of tinnitus aurium. On examination we find roundish isolated swellings, that are very tender and sensitive to any contact. Even the touch of a delicate probe will sometimes cause patients to make an exclamation of pain. These swellings are not usually very red; for the integument is quite thick in the outer portions of the canal, and this is the usual site of the affection. We often find two points of pain and swelling in the same ear, and they are very apt to occur in succession, so that we are by no means sure of being done with a case because one furuncle is cured. The swellings that occur in the lower portion of the canal, the bony portion, which is two-thirds of the whole length, are not usually circumscribed, but diffuse, and are therefore to be classified under that head. They are more painful than furuncles, from the fact that the integument is thinner, and closely adherent to the periosteum, so that such an inflammation is analogous, in the fearful pain which it occasions, to a paronychia, and requires the same treatment, that is, a free incision through the tense and swelled structure down to the bone. I should also say that the pain experienced in swallowing, chewing, and the like motions, from the pressure of the upper jaw, through the glenoid fossa, upon the swelled auditory canal, is one of the symptoms of which patients with either the diffuse or circumscribed forms of external otitis complain very much.

The causes of furuncular inflammation of the outer ear are not very plain. Like furuncles in the other parts of the body, they are often an evidence of a deteriorated condition of the general system; but again they occur where the subjects are in good general health. In such cases some local irritation by mechanical or chemical means, such as have been mentioned in the discussion of diffuse inflammation, is probably the cause.

The general treatment will be determined by the condition of the patient. The local is simple; a deep incision should be made into the swelling, if any one very tender point can be found. It is a matter of indifference as to whether suppuration has or has not occurred in deciding, as to the expediency of an incision. It should be made as soon as the case is made out. Leeches do very little good in furuncular inflammation. After the incision the ear should be douched every fifteen minutes or half an hour, by means of Clarke's ear douche, until the pain is relieved, when it may be used at intervals. The ear should also be cleansed by means of a syringe and the cotton-holder, of which we make so much use in aural therapeutics.

The thorough cleansing will usually relieve the impairment of hearing caused by the swelling and closure of the canal, while the incision and douche will cut short the pain. Each new furuncle is, of course, to be healed in the same way.

The Use of the Taxis in Hernia.

The Georgia *Medical Companion* has an article on this subject, by Dr. C. C. F. Gay, from which we make the following extract:

In case of an old hernia, since the inflammation would be less acute, the patient could be left several days with entire safety, if in the supine position, and with ice or some refrigerating lotion, or perhaps, better still, fomentations with cloths wrung out of hot water applied over the inflamed parts, but, of course, the duration of the time when safety would cease and danger begin, must depend upon the general symptoms, together with the amount of local inflammation present. I shall be justified in stating that the judi-

cious surgeon will never operate simply because the hernia is strangulated. The majority of cases may be relieved without incurring the danger of an operation. Although aware, as I am, that this statement conflicts with the views of authors and the teachings of the schools, I think I shall be able to refer to cases that have occurred in my own practice, and observed in the practice of medical friends with whom I have been associated, illustrative of, and pointing clearly to the truthfulness of what I herein assert. No infallible rule can be laid down, having reference to the manner of applying the taxis, or governing the position of the patient. The rules heretofore suggested are entirely too arbitrary. The management of any single case must stand upon its own individual merits. He who possesses most tact will best succeed. He who has no tact, and there may be such, had better never try to reduce a hernia.

Nothing better than the rules laid down by authors, if I except rules that are arbitrary, can be suggested, that I am aware of, in reference to the method of employing taxis. I might, however, be allowed simply to suggest that often it would be wiser, in grasping a hernial tumor for the purpose of its reduction, to *pull* upon it rather than *push* upon it. In other words, while making gentle pressure over and around the tumor with the hand, if the tumor be of sufficient size to be grasped by the hand, gently drawing away the contents from the point of stricture. * * * * *

The *position* of the patient is worthy of consideration in all cases where the taxis is employed. In this regard authors who have heretofore taught that the supine position, either upon a hard mattrass or the floor, with the hips elevated, or that the patient should at times be turned topsy-turvy, these being positions prerequisite to success, have failed, I think, to teach the whole truth, as experience and observation demonstrates. There are other positions of the body equally essential to success as those above enumerated. The *upright* position is one of them, and the *semi-prone* position is another.

I have succeeded in reducing hernia, after I had failed with the patient placed in all other positions, save the upright and semi-prone positions, by placing the patient upon his side with the thighs flexed upon the body. I have in this position reduced a hernia almost instantaneously, after long trial in other positions. I have never yet succeeded, by turning the patient topsy-turvy, in reducing hernia. I once resorted to this method for experiment, after an operation. The stricture I had divided with the knife; there seemed no obstacle in the way of the return of the bowel, but the bowel did not return, even when the patient was placed almost in the vertical position, with the head down.

I have twice or thrice, after the patient's system had been relaxed, taken him by the legs, after the manner taught in the books, dragging him with his head down while his legs were over my shoulders, and have almost exhausted my strength in this way, to no purpose. Never, in a single instance, have I met with any success by this manner. It is not at all strange that those who have commenced practice with the belief that such a position is proper, should be slow to place any faith in the efficacy of the opposite, or *upright* position.

The Characters of the True Respiratory Murmur.

Dr. James R. Leaming remarks as follows, in the New York *Medical Journal*:—The ear accustomed to auscultation, after a few moments of concentration of the attention upon the respiratory murmur, will recognize its dual composition. If the chest be perfect in condition the tidal-air sound will be heard in inspiration only, soft and short, like breathing gently through the closed teeth, while the true respiratory murmur will be continuous, increasing in fullness in inspiration, and diminishing in expiration. It is of low pitch, and is like the roaring of the sea at a distance, the waves breaking on an even shore of sand; or, better still, like the sound made by bees in cold weather, when the hive is tapped with the finger. It is like the innumerable vibrations of the wings of bees, increasing to maximum in inspiration like the coming waves on the sea-shore, and decreasing in expiration as they recede. If the breath be held, this murmur may be heard without admixture, for there can then be no bronchial murmur. The sound is the susurrus of the delicate muscular fibres of the true respiratory system, contracting and relaxing over the dilating and resisting residual air. If the breath be held after a full *inspiration*, the murmur will be at its maximum; if it be held after *expiration*, it will be at its minimum fullness. It cannot be exaggerated, as has been said of the so-called vesicular murmur. If the true respiratory system be unduly dilated it loses its power to contract on the residual air, and the murmur wholly ceases. This is a sign of emphysema, and is proof of the muscular cause or origin of the sound, which may return again after rest.

This murmur only commences to be developed in the child at eight years of age, becomes recognizable at twelve, but is only fully developed at maturity. A beginner in auscultation may recognize true respiratory murmur in a good subject with ease. But, when the chest has lost its excellent quality as an acoustic chamber by physical changes, resulting from inflammation, or when, from disease of the lung itself, the natural respiratory murmur has been altered or lost, or when the chest, although in its natural conditions, may be covered by thick and hardened muscles, the trained expert ear only can arrive at diagnostic truth.

Many love and enjoy music, and may assist in producing it, but the trained expert alone can lead an orchestra, and harmo-

nize each instrument into a body of perfect song.

These facts, instead of being a matter of discouragement, should induce beginners to pursue auscultation with untiring assiduity, knowing that the end will crown them as masters in physical diagnosis. The ability to recognize true respiratory murmur under any conditions, to analyze its quality, and measure its power, gives its possessor the means of knowing even the approach of that most insidious disease, phthisis, and suggests the methods of prevention.

Treatment of Blenorrhea of the Lachrymal Sac.

Dr. N. BETHUNE illustrates, in the *Canada Lancet*, the treatment he adopts in this troublesome affection, by the following cases:—

1st. Miss A. B., æt. 50. Three years ago she first noticed a "weakness" of the right eye, soon followed by congestion and subsequent inflammation of the conjunctiva, with burning pain, and discharge (probably catarrhal). After applying poultices and lotions, the inflammation subsided, but the eye continued weak and watery, so much so as to require the constant application of a bandage for five months, and seclusion indoors. When she first came under my notice, in July, 1869, the conjunctiva of the right eye was somewhat injected and watery, and there was an evident puffiness below the inner canthus. The lower canaliculus was divided, and after being allowed to remain quiescent for two or three days, a probe (No. 3 Bowman) passed in the direction of the *ductus ad nasam*, was with great difficulty insinuated through a stricture in that canal. The same probe was subsequently passed with much less difficulty for a fortnight (twice a week), after which time larger probes—up to No. 6 Bowman—were gradually introduced up to the sixth week, when my attendance ceased. From that time—now more than two years ago—she has suffered no inconvenience whatever, and considers herself perfectly cured.

J. J. C., æt 28, of a robust constitution, had suffered from stricture of both nasal ducts for a period of fifteen years.

When thirteen years of age he noticed a free discharge of tears over the cheeks during the winter months. In summer he felt very little annoyance. Pressure over the lachrymal sac always caused an evacuation of water and mucus through the canaliculi. The stricture on the left side was complete from the first; but for a period of several years he could by gentle pressure force the tears downwards into the nose on the right side. These symptoms followed close after a cold resulting from exposure during a storm in December, 1869. When this patient first came to me, I slit up both canaliculi of the right side. After allowing a few days to elapse I passed a small probe through the nasal duct of the same side, which, as I previously remarked, was not completely obstructed. I then passed the larger division of Weber's biconical sound forcibly through the constriction, thus establishing a free channel into the nose. Great relief followed this operation; some time subsequently, however, the channel still remaining somewhat impeded, I introduced Stilling's knife, and notched the stricture in three different directions. Strange to say, the patient did not consider either of these operations at all severe, for they are usually very painful. Two days after the cutting operation, he was able to appear in public without any discoloration of the integument or any subsequent discomfort; in fact, the cure of the stricture was complete and required no further treatment. So much, then, for the right nasal duct, and now for the left.

During the summer of 1870, the patient, not being troubled, thought little of the stricture of the left side; but the cold winds of winter drove him once more to seek relief in an operation.

This stricture was complete, and the patient felt some slight apprehension of the probing, inasmuch as some years previously an attempt by another surgeon to force a passage had resulted in the formation of an abscess in the lachrymal sac. However, a plan of treatment precisely similar to that employed so successfully in the right, was in the left, followed by an equally flattering result. He can now (Dec., 1871) pass hours exposed to the cold winds of a Canadian winter without the slightest lachrymation.

Nature and Treatment of Spontaneous Inversion of the Uterus.

In an article in the New York *Medical Journal*, on this subject, Dr. ISAAC E. TAYLOR writes as follows:—

DEGREES OF INVERSION.

By spontaneous active inversion I comprehend those cases which are created by the active contraction of the uterus itself, without subordinate means.

Three degrees of inversion are usually accepted or adopted:—

1. A simple dimpling or depression of the fundus.

2. When the fundus passes down to the os tincæ.

3. When the organ is entirely inverted, the os tincæ remaining alone uninverted. Complete inversion, it is held by some, being more rare than others.

Each of these forms exists in various degrees. To effect the greatest degree of inversion, the displacement must commence from the slightest cup-like indentation of the fundus, and go through all the intermediate stages. More or less time, it is known, is occupied in producing the inversion. Sometimes it is accomplished instantaneously under ordinary contraction of the uterus; at other times, and more generally, by considerable uterine and abdominal efforts, chiefly abdominal, according to Crosse. In some instances the accident is gradual from depression to introversion, or intussuscep-

ion to inversion, the inversion being days, veeks, or years, before it becomes complete, greeably to some writers.

It is held by the same authorities, Crosse, or instance, that, if the uterus be well con-racted after delivery, it cannot subsequently ecome inverted, unless again distended by lood, the sudden escape of which places the rgan in circumstances somewhat similar to hose attendant on delivery, and renders in-ersion just possible. We cannot, therefore, e far wrong in stating, as the general pinion, that inversion can only be com-enced soon after labor, and that most of he recorded instances of its occurring after he lapse of days or weeks may be placed to the account of oversight or error in diag-nosis. A more strongly-expressed opinion by another author (C. A. Lee) considers it self-evident that "inversion must date from a previous labor, if not depending on the weight of a polypus."

Cause of Inversion.

Instead of inversion occurring through an irregular or hour-glass contraction, agree-ably to Radford, or Smith, or Duncan, it is the continuance of a regular and natural contraction, the same as we perceive if there were twins. We all know that, soon after the birth of the first child, the uterus com-mences anew its efforts to expel the second child, and it is easily accomplished. Should, however, the cervix take on an excess of contraction, the cervix will be closed suffi-ciently to delay the delivery of the second child, and it may be some time. If this were not so, then by an excess of irritability of the circular fibres of the cervix, or of the lower part of the body of the uterus, the hour-glass contraction would ensue, the after-birth would be detained. Now, if con-traction of the fundus did not take place, then inertia would follow, with a strong probability of the consequence, in cases of that kind, of hemorrhage, and the unfortu-nate results belonging to it. Hour-glass or irregular contraction may also occur through the anterior and posterior longitudinal fibres, thus dividing the uterus lengthwise, or it may occur by the orbicular muscles, or through the whole of the circular fibres of the body. Duncan, however, rests upon the contraction of the cervix solely for his ex-planation of hour-glass contraction, while the fundus is in a state of inertia, or locally paralyzed.

I accept the incidental remarks which have been made by some authorities, that inversion is comparable to the prolapsus of the rectum and bladder, and I may add the uterus. I believe it is as natural a course of action, as well in the animal as in the human subject. It is more clearly and more dis-tinctly illustrated as a clinical fact, in what we notice when the horse dungs. First the gradual elongation of the anus, when filled with its contents; then, after the dung has escaped, the anus rolled out or everted, when trying to cast off the small particles which remain, and through the slight *vis a tergo*, with the relaxed condition of the sphincter, the intestine follows, and the intestine and rectum are fully inverted.

Case and Treatment.

June 6, 1869.—I was requested to visit Mrs. W., in consultation with Drs. N. C. Husted and Bliss, for an inversion of the uterus. Primipara, aged twenty-five years. After the delivery of the child, in a few mo-ments, the physician in attendance intro-duced his hand to remove the placenta. Through strong efforts, he succeeded in in-verting the uterus, the placenta still at-tached. He peeled off the placenta, and tried to replace the uterus, but could not. Dr. N. C. Husted was sent for. I saw the patient a few hours afterward. The opinion of Dr. Husted was confirmed. The appear-ance of the tumor was large, soft, and flabby, and, when pressed, would contract. There was no hemorrhage at that time. The tumor was sensitive to the touch. Patient was anæsthetized. Dorsal position observed. I attempted to reinvert the uterus, after re-turning it into the vagina. Grasping the fundus and body in my right hand, with the left placed directly above the pubes, and ex-panding the upper part of the vagina with the fingers, I proceeded to make direct pressure on the cervix, as well as I could by the fingers of the left hand, and made direct and steady pressure upward in the axis of the superior strait, but without success. I then withdrew the uterus from the vagina, and, placing my index and middle fingers in the rectum, introduced them into the cer-vix uteri, and raising the body of the uterus, thus forming a *point d'appui*, instead of the abdomen; then, grasping the fundus and body of the uterus, I pressed firmly with the right hand against the fingers near the cervix. Having introduced the uterus into the vagina, I made steady and firm pressure downward and ba kward on the two fingers, which also assisted the stretching of the cervix. By perseverance, I could feel the organ begin to unfold at the cervix, and di-minishing in length, when, shortly after-ward, continuing efforts on the remaining part of the fundus, and removing the fingers from the rectum, the fundus passed through, and the uterus was restored to its normal position. On examination by Drs. Husted and Bliss, the fundus was felt firm and well contracted above the pubes.

In this case I had the opportunity of no-ticing and feeling the contraction and re-laxa ion of the uterus, the same as we realize after delivery through after-pains. Meigs was the first, I think, if not the only autho-rity at that tim e, to refer to this circum-stance, and he counsels that no effort should be made during the contraction, but to wait till the spasmodic action has ceased, and then resume the pressure when relaxation takes place. Adopting the suggestion in this instance, I must say I did not feel any contraction of the cervix when the fundus

and body were in action, verifying the natural action of the uterus during labor. In a short time the uterus was restored perfectly.

I was not aware, when I had accomplished the object of restoration by this method, that I had been anticipated by Professor Courty, of Montpellier. He is therefore entitled to the credit. I had frequently thought and spoken of it as possibly a useful expedient to adopt in some cases. In chronic cases it is also applicable. Courty's case was of ten months' duration, the patient having incessant and free hemorrhages, with extreme debility. His success was rapid, complete, and permanent. The advantage of this method, it is my impression, is greater than the former and usually-adopted one I first attempted.

The method I essayed at first is the one which has been advocated by all the older authorities, as the most natural, according to the principle that the part which comes down last should be first returned. Agreeably to my own views, as it is the first to be inverted, so it is the first to be restored. Some recent authorities have claimed this course as of their own suggestion.

Other Methods.

In contrast with this method, as the fundus is the part first born, that part must be indented first, as the indentation began there, and the attempt must be made to overcome the accident through that portion. By many authorities it is repudiated entirely, although we have records of some instances which have been successful. If the fingers, or hand, or fist, have not succeeded, then we must use the bougie, or stick, or firm pressure on the fundus by a bougie, resting against the abdomen, while the pedicle or neck is manipulated, or a stem-pessary of a peculiar shape. It is more especially applicable in those cases where the uterus does not undergo much if any contraction during the efforts which are made through the fundus, and the uterus is softer and more yielding. One of the strongest objections urged against this procedure is that, in dimpling or indenting the fundus, if we could press the fundus upward, we should find ourselves opposed by a double inflexion, for the body would be grasped by the os uteri, and the fundus would be within the body. It is evident, therefore, that our forces should be directed so as to act upon the angle of inflexion.

The next method of taxis is where one of the cornua of the uterus is first indented gradually, and by degrees passed through the cervix, the other side, and the fundus following. This procedure has been termed the mixed method. It is the same which is carried out by the veterinary surgeon in the mare and the cow. It is in imitation of some of the cases of inversion which have occurred, and especially of the one I have quoted from Ingleby. I take it that the principle of reduction of the inversion will depend upon the condition of the uterus, and the circumstances at the time of reduction, which of the four methods of taxis are to be adopted.

The elastic pressure, which has been so urgently impressed upon the mind of the profession the last few years, acts, as I believe, on the same principle as the rectal and vaginal taxis, and the first method spoken of. It tends to expand the superior part of the vagina, thus enlarging the cervix at its base, exciting or stimulating the fibro-elastic tissue as well as the contractility of the uterus itself, and, aided by the inherent action incident to the elevating forces of the abdomen, bounds or is lifted up into its natural position, the same as we recognize in spontaneous active reduction. The elastic pressure, like all other means to remedy this accident, has its instances of success and unsuccess. In some cases it has acted promptly in a short time. In others, as the case of Dr. F. A. Ramsey, of Knoxville, Tenn., it was seventeen or eighteen days continued, when success was obtained. I believe the length of time in the case of Dr. Ramsey is the longest period on record by this treatment. It teaches us, what we have been the last few years realizing in cases of inversion of the uterus, that steady, persistent, gentle effort, continued, will be crowned with success, either by the taxis or elastic pressure, which is only an internal taxis. This treatment has become, since the cases of Coley, of Bridgewater, in 1837, and T. Smith, of London, one of the established means to adopt when the different procedures of taxis have not succeeded.

Enormous Uterine Tumor.

Dr. Wm. B. Atkinson exhibited, at a late meeting of the Philadelphia County Medical Society, a tumor weighing perhaps thirty pounds, removed from a woman who died on the ninth day after delivery. The delivery was natural, no suspicion of such a tumor being present. Death resulted from pyæmia, and was very rapid. The diseased mass occupied the posterior wall of the uterus, and was much disintegrated.

AMERICAN MEDICAL ASSOCIATION.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

Wm. B. Atkinson,
Permanent Secretary.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, JULY 27, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

☞ Quite too many of our subscribers, many of them old, personal friends, are in arrears on their subscriptions, aggregating a large amount of money that we ought to have in order to a vigorous prosecution of our enterprise. These parties are requested to settle their accounts immediately, or at least communicate with us at once—for, instead of at present further enlarging our edition to accommodate new subscribers, we shall resort to the expedient of dropping the unprofitable ones, and putting their bills into the hands of a collector.

SCHOOLS OF PREPARATORY MEDICAL EDUCATION.

The idea has been started for some years that schools might advantageously be established, which will take the place of the one or two years' reading as an "office student," and the six months' apprenticeship in a drug store, which a time-honored custom of our country thinks proper for a young man to undergo before he commences to attend lectures.

At least one such school has been established, and we believe several. That whose second annual announcement is before us is at Saint Paul, Minnesota, and numbers among its other instructors our worthy associate in the editorial line, Dr. ALEXANDER J. STONE, editor of the *Northwestern Medical and Surgical Journal.*

An extract from the announcement will show the objects of the school. It says:—

"Believing it for the best interests of the Medical Profession of our State that students shall be given greater facilities for obtaining a *preparatory* medical education than can be afforded by any single instructor, and in accordance with resolutions adopted by the American Medical Association, 'cordially approving the establishment of private schools to meet the increased demand of Medical students for a higher grade of professional education than can usually be acquired under the direction of a single instructor,' the 'Board of Instructors' have organized the St. Paul School for Medical Instruction.

"The object of this school is not to represent, or in any way take the place of, a regular *College*, but to prepare students for a better understanding of the lectures which they will hear in the College course, and to drill them more thoroughly in the elementary branches than can be done in the short time allowed by Colleges for instruction; and the arrangement of terms of study will be such that they will not interfere with the winter course of the Colleges.

"The plan of instruction is designed to be, in all respects, thoroughly practical, using all available means of instruction. The mode of teaching is by daily lectures and examinations, and regular clinics, conjoined with oral discussions, in which all the students participate.

"The fact that practical anatomy will be taught each year forms one of the strongest arguments in favor of thus dividing the labor amongst several instructors. Lectures upon Special and Surgical Anatomy will be regularly given, and students will have the opportunity of performing all the principal Surgical operations on the cadaver, under the eye of the teacher."

The course of study in the institution includes recitations and lectures upon Surgery, Therapeutics, Materia Medica, Diseases of

Children, Anatomy, Chemistry, Physiology, Pathology, Medical Jurisprudence, Principles and Practice of Medicine, Obstetrics and Diseases of Women.

We believe this is a meritorious endeavor to elevate medical education; but we are not so well satisfied that the above mentioned course of study is a judicious one. The preparatory instruction required by medical students in this country is a far more elementary one, and if *that* were adopted, the services rendered professional education would be far greater. It is not clinical medicine, practice, pathology, medical jurisprudence, or gynæcology, these schools should teach, but a familiarity with anatomy, with drugs, with the principles of chemistry, with medical phraseology, with Latin enough to write a prescription, with the general laws of physiology and hygiene. They should aim to occupy the outlying works and surroundings of the science, not, as here, the very citadel itself. More humble in aims, they would be more useful to the times. They should be but little occupied with the study of disease, but almost solely with the facts which, when learned, are to be applied in treatment. Too practical, they become too precocious, and are in danger of being of scant usefulness.

Notes and Comments.

Deaths from Chloroform.

Mr. W. F. Morgan, M. R. C. S., writes to the *British Medical Journal*, June 1, about chloroform:—I fully believe that failure of the heart is the great source of danger in its administration; and that electricity, cautiously employed, is the most prompt and certain remedial measure. I shall not soon forget a striking example in the case of an old man admitted with strangulated hernia. The taxis under ordinary circumstances having failed, he was put under chloroform for another trial previously to operation. The hernia was now readily reduced, but immediately he became deadly pale, his pulse stopped, and he seemed in *articulo mortis*. Instant recourse was had to the electro-magnetic battery, and almost as instantly the pulse returned, and the man was safe.

In my experience, whenever dangerous symptoms have arisen, the heart has been the organ affected; and that is, I believe, the result to be watched and provided for when chloroform is administered. I can readily imagine that the lungs may suffer and asphyxia be produced by complicated apparatus and failing valves, mechanically suffocating the patient. Nothing can be more simple, and in my judgment more safe and effectual, than the plan adopted at the Bristol Royal Infirmary. A hollow sponge, conical in shape, with a hole at the apex, is held loosely over the mouth and nostrils, the chloroform being sprinkled on the interior, with or without the intervention of a bit of lint, the admission of air being regulated by a thumb on the hole at the apex. In the two deaths from chloroform which have occurred in the Infirmary, only a very moderate quantity was used, as if the unfortunate result was due to some idiosyncracy.

A Case of Hermaphroditism.

At a recent meeting of the London Pathological Society, Mr. John Wood exhibited the pelvis and genital organs of an adult hermaphrodite. The case was very remarkable. The transverse diameter of the pelvis was feminine, but the antero-posterior was masculine. There were large labia majora, and each contained a full-sized testicle, with its normal coverings. There was a penis, or clitoris, of the size of that of a boy about ten years of age; and a *cul-de-sac*, or vagina, one inch in diameter across and two inches long. There was a proper vas deferens, which entered the prostate gland. He believed the individual to have been a male subject, with very well pronounced hypospadias. Malignant disease of the liver and intestine, with the blocking up of the rectum, was the cause of death. This individual had always been looked upon as a female, and had been married to a man who had afterwards absconded. Dr. Wilks questioned the conclusion of Mr. Wood that the person was a male. When the male organs are not developed, as in the present case, the person generally assumes a female character. He alluded to several cases in point, in which the individual in each case had all the characters of a woman, but was afterwards found to have testicles. Mr. Hulke

asked if the *cul-de-sac* was congenital, or formed by repeated attempts at connection? Mr. WOOD, in reply to Dr. WILKS, pointed out that, in the present case, the testicles were fully developed; to Mr. HULKE, that he could not say, as he was unable to ascertain much about the patient; and to the President, that he had not examined the spermatozoa.

The Tannate of Quinia.

This substance was discussed at a late meeting of the Pharmaceutical Society of Paris. Mr. ROUCHER regards it as possessing rather less activity than the sulphate, but to possess certain advantages in special cases. Mr. REGNAULT stated that by precipitating acetate of quinia with tannin, a turbid liquid is obtained which will pass through the filters, so that it is impossible to wash the newly formed compound, which is very soluble in acetic acid, and which separates completely on the addition of a little sulphuric acid or even of sulphate of soda. The tannate of quinia, freed from sulphuric acid, is nearly insoluble in water, but soluble in alcohol. The speaker also believes that the morphia in wine of opium is not precipitated by the little tannin contained in the cinnamon and cloves, as believed by Mr. DELIOUX DE SAVIGNAC, for which reason he had proposed to substitute these aromatics by sugar, also to replace opium by its extract.

Kidd's Operation for Vesico-Vaginal Fistula.

A paper was lately read to the Surgical Society of Ireland, in which Dr. MAPOTHER described a method of operating for vesico-vaginal fistula, proposed by Dr. G. H. KIDD, and illustrated his remarks by a case in which it had been successful. The patient, aged 25, had fistula from sloughing of the anterior wall of the vagina close to the neck of the bladder. There was a small circular opening. At the beginning of March, in accordance with Dr. G. KIDD'S procedure, a semicircular or U-shaped incision was made round the fistulous opening. The flap thus made was turned aside; and a second flap, formed by an incision half through the vesico-vaginal septum, having been pared on the vaginal surface, was brought up over the situation of the fistula, and secured by four wire sutures. A No. 6 catheter was kept in the bladder for some time, and a rapid and complete recovery followed. The escape of urine was quite prevented by the flap being brought over the vesico-vaginal opening. Dr. G. H. PORTER had seen the operation performed on one occasion by Dr. ROE. The aperture was of very small dimensions. He considered that, from the nature of the soft parts engaged in the procedure, the knife employed should be extremely sharp.

Determining Sulphites from Bisulphites.

At a meeting of the Pharmaceutical Society of Great Britain, Mr. WILLIAMS stated that bisulphite of lime, being soluble in water, may be used as a test to determine whether salts are sulphites or bisulphites. A solution of chloride of calcium is added to the solution of the bisulphite to be tested; if a precipitate occurs (which may be sulphite, sulphate or carbonate), the whole is thrown on a filter, and the filtrate precipitated by lime water, which neutralizes the excess of sulphurous acid, and from the amount of sulphite thus produced, the percentage of bisulphite originally present in the sample can be easily calculated.

Tenotomy of the Tensor Tympani.

Dr. T. E. WEBER publishes his experience in tenotomy of the tensor tympani muscle, and says: Subjective perceptions of the ear have been cured mostly; if giddiness was combined with it, it was always abated; the power of hearing reappearing very often; tenotomy of this muscle seems to be a good preservative for hearing. Other facts and remarks, the description of the knife and the method interesting to specialists, can be omitted here. The author refers to Professor HYRTL, who has spoken of the possibility of this operation.

Antidotes to Carbolic Acid.

Dr. T. HUSEMANN ("Memorabilien," 1872) says that oils can be used as antidotes in poisoning by carbolic acid and creasote. Curara is no antidote. Carbolate of potash and the metals are as poisonous as carbolic acid itself. Chalk is not altogether useless as an antidote, but is not so useful as the saccharine carbonate of calcium. The greatest hope as an antidote is to bring about the oxydization of the carbolic acid. A stomach pump, if at hand, is the best remedy in poisoning by carbolic acid; emetics do more harm than good.

On Tests for Ergot.

Dr. W. H. TAYLOR remarks, in the *Virginia Clinical Record*, on testing for ergot in cases of criminal abortion:—It is greatly to be desired that some unequivocal test shall be found for this drug. As the matter stands now there is none to which exceptions may not be taken of such an insuperable nature as to render it nugatory in a medico-legal investigation. When we consider what grave objections may be reasonably urged against the assumed detection in organic mixtures of such substances as morphia and strychnia, whose reactions have been so long and elaborately studied, we can scarcely expect to certainly identify ergot, on which so much less attention has been bestowed. And, in fact, the prospect for the attainment of certainty in this direction is growing darker instead of brighter day by day. With the intense activity now prevailing in the domain of organic chemistry new combinations are brought to light faster than the characters of the older ones can be determined, and in our ignorance of their properties it is clear that we cannot know what influence these combinations, new to us, but perhaps old to Nature, may be exerting upon the odors, and colors, and crystalline forms on which we are so prone to rely. It is with reason that Fresenius recently wailed forth an invocation to the workers amongst organic compounds, beseeching them to make good their ground as they advance, by more accurately and fully ascertaining the chemical relations of the bodies they discover, and so restore, if they can, to the analytic chemist some of that confidence he formerly felt when he knew not enough to know how ignorant he was.

Treatment of Ectropion.

The following notes are from the clinic of Dr. THIRY, of Brussels:—*Ectropion* is, in the great majority of cases, an affection of the lower lids. Chronic ciliary blepharitis is one of the most common causes of the affection. Although in the majority of cases trichiasis is a cause of *entropion*, yet in certain cases it may cause ectropion, especially when the treatment is careless and the eyelid irritated by the way in which the hairs are pulled out. In other cases ectropion is caused by relaxation of the central parts of the orbicular muscle, where the contents of the orbit have long pressed on it, as when there has been chronic inflammation of the conjunctiva, or tumor of the orbit. Palsy of the seventh pair of nerves may cause a form of ectropion (paralytic), or in old persons the lids fall from their own weight (senile). The consequences of ectropion are most distressing. The palpebral conjunctiva, constantly exposed to the air, loses its normal properties, becomes hypertrophied, and forms a more or less marked elevation, which is frequently inflamed and becomes hypertrophied; the lashes soon fall, whilst the organs of sensation and nutrition are deeply altered. The tears can no longer flow off by the lachrymal ducts, and thus flow over the cheeks, which they excoriate and inflame. The globe of the eye, unprotected by the lid, becomes inflamed, as does the cornea, which very often becomes the seat of ulcers, whose gravity may entail the loss of the eye. As palliative treatment, a lotion composed of 4 grammes of bismuth, with 8 grammes of starch in 12 grammes of glycerine, is used by Dr. Thiry. For curative treatment he makes an incision from the external angle of the eye, comprehending the whole thickness of the skin, and ten to twelve millimetres in extent upwards and outwards. Another incision is made from the outer angle downwards, and to the same extent, and the points united. The triangle of skin is then dissected away. The sutures, whether metallic or vegetable, must be inserted deeply. Thus the lower lid is drawn outward and shortened, whilst the ectropion is removed.

CORRESPONDENCE.

Myopia and Convex Glasses.

EDS. MED. AND SURG. REPORTER:

In the case reported by Dr. M. M. BROWN, in the No. of this Journal for June 8th, he asks the question "Why was it that convex glasses were applicable to a case of apparent myopia?"

From his history of the case, we fail to find any cause at all likely to produce a myopic condition, and think it must have been indeed *only* apparent. We account for the benefit derived from the use of convex glasses in this way: As a result of the very severe injury to the eye, the patient's vision was very much impaired, both for near and distant objects, but by the use of convex

glasses of considerable strength, he obtained a *magnified image* of near objects (as print, etc.) which, to some extent, compensated for the indistinctness and enabled him to see.

This is the case, moreover, frequently in *true* myopia of a very high degree, very strong concave glasses failing to bring the rays to a focus upon its retina, or if they do so the image is so much reduced in size that the patient is often willing to sacrifice a clear definition of the object for an increased size of the image. Amplifiers are the forms of instrument most frequently used. DONDERS makes mention of this in his exhaustive treatise on the "Anomalies of Refraction and Accommodation."

SWAN. M. BURNETT.

Knoxville, Tenn., July 4th, 1872.

NEWS AND MISCELLANY.

University of Louisiana.

Prof. Warren Stone having resigned the Chair of Surgery, Prof. T. G. Richardson has been elected to fill the vacancy.

Dr. Samuel Logan, late of the New Orleans School of Medicine, has been elected to the Chair of Anatomy vacated by Dr. Richardson.

Medico-Chirurgical Society of Philadelphia.

Officers elected:—

President.—P. D. Keyser, M. D.

1st Vice President.—E. P. Bernardy, M.D.

2d Vice President.—J. S. Eshleman, M.D.

Secretary and Treasurer.—John W. Millick, M. D.

Assistant Secretary.—Thos. A. McRean, M. D.

Corresponding Secretary.—H. W. Ozias, M. D.

Councillor for four years.—A. G. Reed, M. D.

Councillor for five years.—James Collins, M. D.

Patents Issued.

List of Medical Patents issued from the U. S. Patent Office to United States Inventors, for the week ending July 2, 1872, and each bearing that date. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C.:—

Medical Compound for Heart Disease, &c.—Michael D. Britten, Eaton, Mich.

Medical Compound for the Teeth—John C. Hassell, Nevada City, Cal.

Medical Compound for Coughs, Colds, &c.—John Willey, Oakland, Cal.

MARRIAGES.

BENNETT—BLACKMAN.—At the residence of the bride's mother, Mississippi City, on the 18th July, by the Rev. E. G. Taylor, D. D., Mr. Pickens C. Bennett, of New Orleans, and Miss Sue G., daughter of the late Dr. H. M. Blackman, of Lake Providence, La.

BOOTH—MACLAY.—By Rev. J. O. Hough, May 16, at the residence of Dr. C. B. Maclay, Mr. C. L. Booth and Miss Siddie Maclay, all of Delavan, Ill.

CLEGG—EDGAR.—At Trinity Church, New York, June 27, by Rev. W. W. Holley, Charles A. Clegg, of Dayton, Ohio, and Mary Seguine, daughter of Dr. D. A. Edgar, of Staten Island.

CORTELYOU—TOWNSEND.—June 29, at St. George's Church, Newburgh, New York, by Rev. Dr. Brown, Dr. L. V. Cortelyon and Carrie, youngest daughter of the late William H. Townsend.

DURYEE—HALL.—At Newark, N. J., June 27, by Rev. E. P. Terhune, D. D., Miss Amy J. Hall, daughter of A. A. Hall, Esq., of Newark, N. J., and L. Duryee, of Champlain, N. Y.

FRENCH—BURLEIGH.—In Concord, N. H., June 25, by Rev. Hosea Quimby, C. L. French, M. D., of Glover, Vermont, and Nellie Burleigh, of Concord, N. H.

JAMES—THOMPSON.—In the Second Presbyterian Church, Rahway, N. J., June 19, by the Rev. J. A. Liggitt, assisted by the Rev. David M. James, of Bath, Pa., Hiram H. James, M. D., and Fannie B., daughter of the late Jonathan Thompson, of Rahway.

MARTIN—HUBER.—June 27, at the residence of the bride's parents, in Hamilton, Ohio, by the Rev. Albert Nichols, James A. Martin, of Dayton, and Anna, eldest daughter of Dr. William Huber.

PRATT—STRONG.—In Harrisburg, Pa., June 27, by her father, the Rev. A. K. Strong, D. D., assisted by the Rev. E. H. Pratt, Miss Mary E. Strong and Ezra B. Pratt, M. D., of Chanmont, N. Y.

RODGERS—WATSON.—By Rev. R. F. Wilson, in Bedford, Pa., June 29, 1872, at the home of her brother, Dr. William Watson, Dr. Joseph G. Rodgers, of Madison, Indiana, and Miss Maggie S. Watson, of Bedford, Pa.

DEATHS.

BANKS.—Near New Hamburg, New York, July 3, 1872 Lévenax, son of Dr. James L. and Isabella M. Banks, aged 4 months and 4 days.

CHEESMAN.—In New York, on Tuesday morning, July 2, Martha H. Cheesman, widow of the late John C. Cheesman, M. D., and daughter of the late Willet Hicks.

CLARK.—At Perth Amboy, N. J., on Tuesday, July 9, Freddie, only son of Dr. S. V. D. and Anna M. Clark.

DOW.—In Plainfield, Vermont, June 10, of consumption, George Henry, youngest son of Dr. Hiram and Elizabeth Dow, aged 24 years.

EBERSOLE.—Of cholera infantum, Clifford, son of Dr. Jacob and Frances Ebersole, aged 6 months.

GILLETTE.—In New York, July 5, Walter Cutenius, infant son of Dr. W. R. and Annie C. Gillette.

GRIFFIN.—In New York, on Saturday, July 6, Bradney Griffin, M. D., in the 30th year of his age.

HUNT.—Sunday, July 7, at Cornwall, on the Hudson, in the 48th year of his age, Charles H. Hunt, counsellor-at-law, son of Dr. Samuel M. Hunt.

TOTTEN.—At Quezaltenango, Guatemala, May 29, Gilbert H. Totten, M. D., son of Col. George M. Totten, aged 33.

THE

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Original Department.

Communications.

EXCISION OF THE HIP-JOINT FOR MORBUS COXARIUS.

By T. Curtis Smith, M. D.,
Of Middleport, Ohio.

With a case of coxalgia in hand, which has reached the third stage, after having passed successively through the two previous stages, resisting all the treatment instituted for its arrest, the *grave question* naturally arises, *Shall we, or shall we not, excise the diseased joint?*

Under such circumstances the intelligent and conscientious surgeon can fully appreciate the gravity of the interrogation, and the responsibility resting upon him in deciding the course proper to be pursued. In the answer, many important points for consideration will arise, each in themselves more or less difficult of ready and correct response. To consider and answer as many of these as a brief limit will permit, will be one object of this paper.

Among the first queries arising will be, What will be the results of the case or cases if other than operative treatment is instituted and carried out? This would naturally lead to a consideration of the prognosis. What, then, is the prognosis? During the first and second stages, or at least up to the first half of the second stage, the disease may be, and often is arrested, under proper management, and a more or less useful joint results. Excision, then, during these stages, is out of the question, unless we accept the advice of Fock, who taught that excision should be resorted to as soon as caries of the joint was satisfactorily diagnosed. But few have ever been sufficiently impressed with the value of this advice to carry it out in practice. Indeed, it would be folly to perform excision while there was a reasonable prospect of recovery without it; but we have no right to cling to the hope of such recovery when every, or almost every symptom indicates a distant fatal result, without operative interference.

When cases reach the third stage, much of the future result will depend on the extent of the disease, and the constitutional diathesis of the patient. If the osseous disease is extensive, or if the case be one of a strumous habit, little may be expected from ordinary means, and if the latter condition prevails largely, operative interference may prolong life, and prevent a vast amount of suffering, but probably will not be a final success. Also, when there is evidence of visceral involvement, operative procedure would not be justifiable. As to the final result in these cases, without excision, various opinions are still entertained; while some maintain that a fatal issue may usually be expected, either from long continued and free suppuration, or from the various organs becoming involved in the course of the disease, and that the most that can be expected, however well the treatment is carried out (we are speaking now of the third stage only), is that the patient will recover, if at all, with a fearfully impaired constitution, an anchylosed hip-joint, which is liable to become so at any angle, with deformed spine, and so left an easy prey to any future attacks of disease. Of the correctness of this opinion

I am myself convinced. A good idea of the deformity resulting from this disease may be obtained from an article and accompanying cuts in the *American Journal of the Medical Sciences*, for April, 1867, p. 414.

While anchylosis is the rule in recoveries from coxalgia, it does not invariably occur. Only a few days ago a case presented at my office which had, as he stated, suffered with the disease forty years ago. There were still existing the cicatrices of seven different sinuses, which had formerly discharged pus, and out of one of them came the head of the femur, which he still has in his possession.* The limb is five and a half inches shortened, much atrophied, and weak. The upper end of the femur rests on the dorsum ilii, rather posteriorly, at which point a kind of fibro-cartilaginous capsule seems to be formed, and in which the limb can be moved two and a half inches up and down, and be thrown outwards so far that the rounded end of the bone can easily be felt through the thin tissues covering it. He walks very imperfectly, and does no manual labor. He is now fifty-eight years old, and states that the disease began when he was fifteen. The motion at this false joint is quite free in all directions. In reference to the prognosis of this disease, Gross states† that, "left to itself, the disease nearly always proves fatal, life being gradually worn out by hectic irritation and profuse discharge. Assuredly, then, unless the patient is in an utterly forlorn condition, both science and humanity would dictate the propriety of interference, in the hope of rescuing the individual from his impending fate."

Erichsen thinks when suppuration is established recovery need not be "despaired of;" "but convalescence will be greatly protracted." But he frankly admits the gravity of the disease, both to life and utility of limb, stating, however, as we have above, that very much will depend on the patient's constitution, and the extent of the disease. The authority of many might be given, stating an unfavorable prognosis, but we will give much of this, necessarily, further on, in stating the indications and contra-indications for excision in coxalgia.

History since 1769.—Charles White, of Manchester, England, first proposed excision of the hip. He performed this operation on the cadaver, and says, "I have no doubt but that this operation can be practiced upon the living subject with great prospects of success." From this date down to 1817, various surgeons, as Vermandois, Chaussier, Wachter, Kœler, and Rossi, experimented on dogs, proving the operation successful on these animals. Others have performed similar experiments since that date.*

Schmaltz was the first who operated intending to remove the diseased head of the femur (1817); but after making his incisions was surprised to find the head had already separated, and was lying detached in the joint. This operator should have the credit of being the first to attempt to carry out the suggestions of Mr. Charles White, made forty-eight years before the date of his operation.

Anthony White, of Westminster Hospital, was the first to really perform the operation of excision, which he accomplished on a boy eight years of age, who recovered. The head of the bone was dislocated, rested on the dorsum ilii, and was found to be carious. The head and trochanters were removed. This occurred in 1821. Two years later Hewson, of Dublin, repeated the operation, losing his patient. No other operations are known to have been done in Great Britain for twenty-two years. But on the continent Oppenheim, in 1829, and Sentin, in 1832, operated. In 1845, Fergusson, of King's College Hospital, operated, and by his published papers revived the operation in England, since which date it has, through violence of controversy, fought its way up to becoming an established procedure in nearly all civilized countries. It is now known to have been performed about 400 times, with very varying success in the hands of different surgeons.

Propriety of the Operation.

As the disease is by no means one of rarity, it becomes a practical surgeon to operate when the case is a proper one. Some contend that it is never a justifiable measure to remove the joint under any circumstances, and that many cases recover in spite of the operation rather than on account of it, and that very many of the cases operated on would effect a spontaneous

* Nature, in this instance, removed the offending head of the femur.

† Sys. Surgery, vol. ii., p. 1018, 3d ed.

* F. Lee ster, Trans. Med. Soc. of Mich.

cure, and, therefore, the value of the operation is greatly over-estimated.

On the other hand, "no principle of surgery is better established than that of removing, when practicable, sources of irritation. It is a well recognized fact that dead bone exposed to the action of the air is always an irritant, keeping up suppuration; and it is equally well established that long protracted suppuration breaks down the general health, and may either directly, or by induced amyloid visceral degenerations, ultimately cause the death of the patient. Why not, then, in view of this principle and these facts, excise the carious head of the femur? For two reasons, say the opponents of the operation: 1st. In a considerable number of cases spontaneous recovery takes place. 2d. The caries is not limited to the lower half of the coxo-femoral articulation, and in order that excision may accomplish its object it must be complete, not partial, removing all the dead bone." (Conner, in *The Clinic*, for Dec. 9, 1871.)

It is true that under the present management of this class of cases, or rather the present available management, very many of these cases may effect a spontaneous cure. But this is only correct with reference to those who possess naturally good constitutions, are not tuberculous, are well managed, and possess the advantages of good, wholesome, nourishing diet, fresh air, and other valuable hygienic surroundings. But these advantages do not always attain. In hospitals, and among the "well to do" and intelligent classes, these hygienic advantages and the mechanical treatment can be kept well in hand; but among the poor and ignorant, where most of these cases originate, such is often impossible. They can neither furnish the means nor see the necessity of the treatment being so long carried out as is required to effect a permanent cure. As a result many of these cases terminate fatally that might be saved by excision. "The value of coxo-femoral resection is consequently forced upon the attention of every practitioner."*

The second objection mentioned above is one that "is just and serious," if the resection is not sufficiently thorough to remove all the diseased osseous tissue. But since the operation was first performed, surgery has become more bold, and the cotyloid cavity, and even much more of the os innominatum, has been successfully removed, and, by Hancock, the greater extent of the diseased bone is considered as constituting a greater necessity for operative interference; and we must admit the propriety of this reasoning when we remember that the patient's chances for spontaneous recovery, *cæterus paribus*, are in proportion to the extent of the osseous disease.

Let us see what constitutes the objections to excision. Syme, who bitterly opposed the operation, says,* "There can be no hesitation in regarding the operation as decidedly improper, since it is well known that the acetabulum is, with hardly any exception, implicated in the disease, and suffers from it to a greater extent than the femur. Although, therefore, one out of twenty cases of morbus coxarius admitted of an effectual excision, an operator would certainly not be justified in the general employment of a practice which could be of use so very seldom. If it were possible to ascertain previously to the performance of an operation whether or not the patient could be freed by it from his disease, there might be some advantage derived from it; but as this is not the case, prudence and humanity equally forbid excision of the hip-joint."

It is evident that Syme considered the disease of the cotyloid cavity an insuperable barrier to excision, but some, in fact, very many able surgeons do not, at this date, consider that it renders the case too grave for operative interference, and some think it calls more loudly for excision.

Dr. C. F. Taylor, of the New York City Orthopædic Hospital, says, "I notice that, as a rule, with one or two notable exceptions, those who have most to do with these cases are least inclined to rush into so grave an operation. The operation should be to save life; so far as I have seen it is worthless for saving the use of the leg. An anchylosed joint is much more useful than an exsected one."†

Le Gros Clarke (Loc. cit.), who excised the hip-joint some years since, at St. Thomas' Hospital, is "not over partial to this operation." He says, "I have repeatedly excised the elbow and knee joints, and entertain high opinions of these operations

* Leyster, of Detroit, Mich.

* Syme's Surgical Works, from P. S. Conner, in *Clinic*, Dec. 9, 1871.

† Michigan State Soc. Trans., 1870, p. 27.

in suitable cases. The difficulty of determining the condition, and of selecting the time adapted to excision of the hip-joint I consider much greater than in the case of other joints similarly diseased."

Drs. Vincent Jackson, E. Andrews, and Maisonneuve think that with the proper use of apparatus and antiseptic injections, most cases will recover without excision. Bryant states when the head of the femur and acetabulum are diseased "there are not many instances when much benefit can be expected, and as a consequence the operation of excision should not be performed."*

Dr. Louis Bauer† is of the opinion that if caries "extends *to* the acetabulum and beyond the bones of the pelvis, but little can be expected from an operation which has to leave behind it diseased structures," and further (Loc. cit.), "the more improved principle of treating hip-joint disease must necessarily tend to diminish the number of operations. Though the disease will take its course as before, still, by keeping the joint at rest and in a good position, the head of the bone will be gradually carried off without much disturbance to the system, by what may be called interstitial absorption, or by a formation of new vessels and establishment of a new source of supply; nevertheless, the operation will retain its value in all those cases of hip-joint disease accompanied by profuse suppuration, threatening life by loss of substance."

Bilroth states,‡ "Resection of the hip is open to one grave objection; we cannot resect the acetabulum, which is usually diseased at the same time, or we can only do so imperfectly."

Again, Syme says (Braithwaite v. 19, p. 119), "If the articulating surface of the head of the thigh bone be carious, it follows as a matter of absolute certainty that the acetabulum must be in a similar condition. But as the acetabulum does not admit of a removal in the living body with any prospect of safety or advantage, no benefit can be derived from taking away a part of the articulation; and, therefore, excision of the head of the thigh bone for caries of the joint should be regarded as no less erroneous in theory than objectionable in practice."

In the language of Prof. Conner (Clinic, Dec. 9, 1871, p. 206), "Acetabular disease, then, is the lion in the path." And so it seems to have been the case, and is so yet, but to probably a less degree. While Syme dreaded to remove the cotyloid cavity, he seemed to have no fear in removing necrosed bone from the pelvic bones at points where the pelvic cavity was quite as much endangered as in perforating the acetabulum in morbus coxarius; for, in this disease, when the continuity of the surface of the cavity is seriously broken up or carious, and perforation likely to occur, nature provides for it so as to prevent, in most instances, the pus from entering the peritoneal cavity, by a proliferation of the tissues—in the periosteum and fascia—to such a degree that pus seldom reaches the pelvic viscera or peritoneum. Hence, if these tissues are thickened, and the periosteum "easily separated," or already so, the bugbear of entering the pelvic cavity during the process of removing the acetabulum, or the floor of it, is not so great as many imagine. Again, if pus has entered that cavity, the simple retention of the diseased acetabulum adds nothing to the better chances of the patient, but rather adds to the difficulty, as it is still pouring out pus and morbid secretions, adding to or keeping up the fire already built. But the removal of the cotyloid cavity, or the floor of it, as may require, does facilitate the chances of escape of the morbid fluid, and afford better opportunity for nature to assume a healthier condition within the pelvis.

On this point Mr. Hancock says,* "It is only in a few rare instances that the surgeon can tell beforehand what is the condition of the cotyloid cavity; but supposing he can do so, that a patient presents whose condition imperatively calls for operation in all respects, but that the acetabulum is extensively diseased, are we to abandon this patient to his fate and suffer him to die in agony? Is it not rather an additional reason for performing the operation? since the greater the amount of disease the smaller the chance of recovery; whilst the value of an operation does not consist in the facility of its performance, but in the urgency of the symptoms and the extent of the disease and suffering it is capable of removing. It is very true, that in the majority of instances the bones of the pelvis appear to possess a wonderful power of reparation. The cases

* Diseases and Injuries of Joints, p. 144.
† Mich. State Soc. Trans., 1870, p. 29.
‡ Surg. Path., Amer. ed., p. 372.

* See Barwell, p. 434, Dis. Joints.

operated on show this." . . . . . "It would seem, therefore, much the safer to remove the doubtful portion of the acetabulum than to leave it behind, or merely to scrape it with a gouge." He states still further, "Mr. Coulson and Mr. Henry Smith lay considerable stress upon perforation of the acetabulum as an insuperable barrier to the operation; but if I am able to prove that instead of being so, the operation may be performed under these apparently unpromising circumstances, it will, I am sure, be agreed that its application to such cases eminently enhances its value. Since it affords a prospect of cure to an amount of disease hitherto considered irremediable. Presuming, always, that the disease is confined to these limits, that the viscera and spine are healthy, and the lungs free from tubercles, I do not understand why a pelvic abscess depending upon hip-disease, or caries of the pelvis, should not be cured as well as any other abscess connected with caries elsewhere, provided it can be reduced to the same condition. The amount of caries is often comparatively small, and though capable of causing excessive discharge, is confined to the limits of the acetabulum and the part perforated. In pelvic abscess, depending on hip-disease, the head of the bone is often retained in the acetabulum after perforation of the latter has obtained: the matter thus escaping from the joint, the same lull in the constitutional symptoms takes place as is so often observed after spontaneous dislocation. Such abscesses are not cured, because the matter, if left to itself, cannot find a depending exit." . . . . .

"The matter in pelvic abscess from hip-disease is outside the obturator fascia, between it and the bone separating the former from the latter, and causing a considerable interval between the two, so that the whole of the cotyloid portion of the pelvis, and for some distance beyond, may be removed without any risk of injury to the pelvic contents." . . . . . .

"In those cases in which there is neither pelvic abscess, nor perforation, but extensive disease of the acetabulum, I cannot see the objection to the operation. Here we have a patient actually dying; we know that an operation holds out the only chance. The whole of the acetabulum, even in a healthy condition, may be removed without penetrating the cavity of the pelvis, or injury to the parts contained; the whole of the operation is external to the obturator muscle, consequently to the levator anus, and so far, extra-pelvic. And if it can be done thus easily when the parts are healthy, it can be done with still greater facility when the acetabulum is much diseased, and when, in all probability, the internal periosteum and obturator fascia will be detached from the bone."

Barwell* believes that a certain class of cases will, in spite of the most approved treatment, go on from bad to worse, especially of those that begun as ostitis. "In such cases excision is the only resort." This operation is usually postponed too long, and instead of regarding it as an ultimate resource, we should rather aim it as a means whereby we may yet procure for the patient a useful limb. Amputation he considers as "worse than useless," and not to be thought of in this disease.

Fock believed that excision should be practiced as "soon as caries of the joint has been diagnosed with certainty." This is probably too extreme, for no doubt many cases may effect a cure, under proper management, after the disease is well known to be established, and has reached the latter part of the second stage, or even the third.

Dr. Richard Good states that, while there "are cases cured without the interference of the knife, how many who have had every advantage of mechanical treatment have lost their lives? It is our opinion that more could be gained, in many cases, by freeing the patient from the source of evil, especially if it be a local one, than by permitting it to remain, and expect Nature to perform a cure." As to the time for excision he agrees with Fock.

Dr. Sayre says† "that a very extensive experience in this class of diseases in the last ten years has only confirmed my views that when the bone has become carious or necrosed it acts as a foreign body, keeping up suppuration until it has been discharged by the slow process of exfoliation, and often the periosteum throwing out new bone imprisons the dead portions, so that they cannot escape; and so the drain is kept up until they succumb from exhaustion. To prevent this I think it always better, under such circumstances, to operate, peeling off the periosteum, entirely removing the dead bone,

* Dis. Joints, p. 333.

† Mich. State Soc. Trans., by H. F. Leyster.

and thus accomplishing in a few minutes what Nature requires years to do."

These quotations could be lengthened out to a great extent, but it is unnecessary. Let it suffice to mention that Furguson, J. D. Hill, Gant, Ashhurst, Gross, Sayre, Bryant, Barwell, Erichsen, Langenbeck, Eulenberg, Esmarck, Fock, Bardellin, Dumreicher, Krackowizer, Bauer, Andrews, Hancock, Cheever, Good, Miner, H. H. Smith, Winne, Hodge, and others, all more or less warmly advocate the operation of excision. A few advocate it as a dernier resort, but more advocate it when all reasonable chance of recovery without operation has proved to be of no avail in arresting the disease; while still others warmly advocate early and complete excision. For myself, I think when proper medical treatment and mechanical apparatus have been well tried, without arresting or curing the disease, or affording any very reasonable prospect of cure, the case being in the third stage, with no spinal or visceral involvement, or serious contra-indications, that the surgeon who would refuse to excise the hip-joint would be very derelict of duty to his patient. And in regard to the extent, I would say, if the acetabulum is diseased, or even if the caries extend beyond that cavity, excise all of the diseased bone, by all means, as any portion left behind will continue to act as a source of irritation, thus keeping up the exhausting drain, and weigh against the chances of final recovery.

The Time for the Operation.—A very natural question arises, When is excision indicated or admissible, and when is it contra-indicated, and therefore inadmissible? By some surgeons in the past, as in the present, involvement of the acetabulum was and is still considered a bar to excision. But I think it is now sufficiently proven that this does not by any means contra-indicate operative interference; and I think, as Mr. Hancock states, that it is only an additional reason why it should be done, for the greater the extent of the caries the smaller the chances of recovery by other means, while at the same time its removal does not seem to but slightly, if at all, increase the fatality after the operation. Besides, it cannot, in many cases, be decided beforehand whether the cotyloid cavity is diseased or not, or to what extent. In a paper by J. Ashhurst, Jr., published in the "Pennsylvania Hospital Reports" for 1869, in 102 cases the acetabulum was more or less removed with a mortality of 36 per cent., while in 35 the acetabulum was not touched, followed by a mortality of 43 per cent. So far as this goes, it shows 7 per cent. in favor of removing diseased portions of the cavity. Eulenberg gave his opinion that partial removal of the carious bone was followed by greater fatality than complete, whether it be in the femur or cavity, or both.

In arthritic coxalgia excision is seldom called for, as recovery generally occurs under proper management with an anchylosed joint. But in the third stage of caries of the joint, where every available means has failed to afford any reasonable prospect of recovery, the operation is not only proper, but absolutely demanded at our hands; and while I would not agree with Fock that it should be done as soon as caries of the joint is positively diagnosed, I would not, on the other hand, advocate its performance as a *dernier resort*, or when the last thread of life is about to snap. Too much of such work is what gives the statistics of this operation the comparatively unfavorable showing they now have. I would, therefore, advocate resort to excision of the hip-joint, when, after fair trial of good diet, hygiene, and remedies, and of mechanical means, there was little or no sign of improvement, but evidence of failure in the face of these agents; and when there was little or no visceral, spinal, or other serious complication, it should then be done.

The following rules are given by Frederick J. Gant, Surgeon to the Royal Free Hospital, of London, and which may generally govern us in these cases:—

(1.) "Destruction of the articular cartilages, without the supervention of anchylosis,* will always justify operative interference by excision. The constitutional condition will probably *not* then have advanced to hectic and emaciation. But the state of the general health should primarily determine the necessity for excision in all cases, and *not any arbitrary consideration of the period of the disease, and the condition of the joint* (italics mine). Whenever, therefore, the general health is manifestly failing, whatever may be the stage of the hip disease, excision should be resorted to, and without further delay." . . . . "On the other hand, the most extreme state of constitutional exhaustion previous to the operation

* *Lancet* for October, 1871, p. 506.

of excision may be followed by recovery after removal of the diseased bone."

(2.) "Osseous anchylosis, with mal-position of the limb, will *not* justify the peril of attempted excision." . . .

(3.) "The extent of bone diseased may be considerable, and involve both the femur and acetabulum. In the femur the diseased portion may include the head, neck, great trochanter, and shaft, entering even into the medullary canal. In the *acetabulum* the diseased portion may include the whole floor of this cavity, and even extend to adjoining portions of the ilium, pubes, and ischium. Neither of these conditions of extensive osseous disease prohibits excision; but the acetabulum not unfrequently recovers itself when the diseased head of the femur has been removed from further contact and attrition."

(4.) "Dislocation is *unfavorable* (italics mine) for excision, as implying an advanced stage of the disease constitutionally. The significance of this local condition will, therefore, diminish in proportion to the absence of marked hectic and emaciation."

These rules are quite contrary to instructions laid down in other days, and by a few now. The third rule is certainly a correct one, for it has been proven beyond reasonable room for doubt that in proportion to the extent of the osseous disease is the danger of fatality to the patient without excision; but while extensive osseous disease lends gravity to the case for operation, and its final results, the subjects of it not unfrequently recover. In proof of this, reference need only be made to various authorities on the subject. Furguson removed in one instance 4½ inches of the femur. In another, several inches of the upper end of the femur, the ilium to the anterior inferior epinious process, with a large part of the body of the ischium, and part of pubic bone. The patient made a good recovery. White, of Delaware, removed four inches of the upper end of the femur. A good recovery followed. Gant has removed five inches of the upper end of the femur with excellent results. The most extensive removal of the femur published, so far as my knowledge goes, is reported by Dr. Charles Kearnes,* at St. Elizabeth's Hospital, Covington, Kentucky. The patient was twelve years of age, who had been more or less afflicted with the disease for two years. In this case the upper end of the femur was removed down "to the *expansion of bone just above the condyles.*" . . . . "The wound healed kindly, the discharge continuing longest at the point opposite the acetabulum. In six weeks time the boy was upon his crutches, and walked around the hospital and grounds adjacent; the weight of the foot continuing the extension, and, in fact, being the only extension the limb ever had. At the expiration of three months he left the hospital, and I have seen him only once since December 1st, when upon careful examination of the limb I find, where the femur was, a hard substance, larger than the natural femur, which I am inclined to think is ossific matter. The limb is not atrophied, or very little, and shortened 5¼ inches. The motion in the hip and knee being good, with power to flex and extend, to rotate, adduct and abduct, and with power sufficient in the leg to support, for a short time, the weight of the body."

Gant's fourth rule is certainly correct, for it is now established that luxation of the head of the femur seldom occurs in coxarius, and when it does so, it is not until the local disease has so far impaired the powers of the constitution as to render a favorable result after excision doubtful.

The question naturally arises, what is the utility of the limb following excision, as compared with that resulting from natural cure, or cure without excision. There is no doubt but that if the anchylosis occurs in a good position it affords a more useful limb than is often obtained after excision. But this correct position cannot always be obtained, as will readily be observed in many cases, and by reference to cases, with drawing representing the same, in Erichsen's last edition of Surgery, given by Ashhurst, of Philadelphia, in illustration of cases of natural cure which occurred at the Pennsylvania Hospital. It will be seen that under the best of care that can be used, anchylosis may take place at any angle with the body, obtuse, acute, or at right angles. It is also true that in all cases where anchylosis occurs, the spine is more or less deformed, to compensate for the loss of motion at the hip, and very often these deformities are most unsightly, and not unfrequently render the limb useless. In the case of recovery coming under my observation, where anchylosis did not occur (see *ante*), the limb was of

Clinic for Dec. 30, 1871.

sufficient utility to walk on it, but the spine was not deformed. This is the only case of the kind I know of.

After excision there is utility of the limb in 60 per cent. of those who recover, *i. e.*, there is that proportion that are able to walk on the limb with or without the aid of a cane. Hodge's table shows 111 recoveries, of which 56 had "more or less useful limbs." Of Good's 112 recoveries, shown by table, 52 recovered, "42 patients could use the limb," the remaining 10 cases, result not noted.

The rate of mortality following the operation varies greatly with the age of the patients. Of those under 10 years, two-thirds recover; between 10 and 20, one-half recover; after that age, up to 25 years, one-third recover. But one case has been known to recover after thirty years of age, and that was at the age of 58 years. From 10 to 15 years the fatality is a little more than one-third, with nearly two-thirds of recoveries. It will be seen, then, that after the age of puberty it becomes a very fatal operation. According to Dr. Ashhurst's statement* there have now been 400 cases of excision reported, and taking all the cases and all ages there has been a recovery of but 50 per cent. It will be remembered, however, that very many of these cases were operated on as a dernier resort, to save life only, and with no reference to the use of the limb, and that it also includes those whose ages would necessarily preclude the probability of a favorable result. More recent advances have been doing much towards placing a more favorable aspect on the statistical showing, and this by not making excision a dernier resort, but one which should be done before life is seriously imperiled.

During the summer of last year I had under my charge a little girl who was suffering from this disease. When she came into my care she was just entering the third stage. The evidence of suppuration soon became apparent. An abscess formed below and in front of the trochanter major; the right hip being the one involved. She had been treated up to this time without having extension practiced or strict quietude enjoined, and with a very irregular remedial course. She was pale, anemic, hectic, sweating freely during the night, a constant sufferer from the agonizing pain, and added to all this were very bad hygienic surroundings in most every particular. She was aged 7½ years. There was no mistaking the nature of the case. I placed her on a tonic alterative course, with the best nourishment that could be afforded, and the free use of various anodynes. In short, every means was used to arrest the disease that could be brought to bear, but without avail; she continued to fail. In July I recommended excision, to which the parents after a short time consented. I then called a council, the majority of whom disagreed with me, both as to the nature of the disease and the necessity of the operation, all advising the continuance of the treatment for at least a month, and carefully observing its effects. To me this seemed like a piece of nonsense, for the child had already been rapidly failing under these means, and I believed much valuable time was being lost by continuing in the same course. I could do little more than consent to the voice of older and a greater number of heads. The test proved that the child still continued to fail. I then resolved to operate, which I did on the 18th of September, 1871, assisted by Drs. Hudson, Guthrie and Tidd. The head of the bone was removed below the trochanter major. It was found to be carious, as was also the cotyloid cavity, the floor of which was gouged out. But little blood was lost, and the shock was well borne. The excruciating pain was no more felt, and the absence of this alone was quite enough to pay for the operation, as she was now comfortable and cheerful, and so continued for several months. In less than three weeks she was able to ride out, and improved rapidly up to the 20th of December. About that time the healing process seemed to cease, an ugly cough made its appearance, hectic fever again appeared, suppuration became more free. This cough seemed to be the result of bronchitis caused by cold. From the date above named there was no improvement, but a gradual decline, with evidence of pulmonary tubercular disease. The case terminated fatally about the 15th of January, 1872.

I have no doubt that had this case been operated on two months sooner the chances would have been much better for final recovery. As it was, I am satisfied that life was greatly prolonged, and I *know* a vast amount of suffering was prevented, for after the operation she never complained once of any pain, whereas, before it, her shrieks from the agonizing pain, which was almost

* Amer. Journal Med. Science, for Oct., 1871.

constant, were terrible. Under similar circumstances I would feel justified in repeating the operation, but I would resort to it earlier. But, even if I knew there would not be a final recovery, either with or without the operation, I would perform it on account of the relief from suffering which it would afford. I have not detailed all the particulars of this case in full, but simply given the main points.

Again, I do not wish to be understood as being an unlimited advocate of excision, but simply as warmly commending it after other means have had reasonable time and opportunity to arrest the disease without success, and where there are no very serious contra-indications, such as have been mentioned in former pages of this article.

GYNÆCOLOGICAL NOTES. — RUPTURED PERINEUM.

By T. J. Hutton, M. D.,

Resident Physician, Long Island College Hospital, Brooklyn, N. Y.

In a previous article, written under the above heading, was forwarded the clinical record of cases illustrating amputations of the cervix uteri. The present article contains the clinical record of seven cases operated on for ruptured perineum in this hospital.

Case I.—Harriet B., aged 24, U. S., admitted to Long Island College Hospital, March 6, 1871; has been married nine years; has had three children. At birth of second child perineum was injured; sphincter ani is not involved, yet the uterus has been at times wholly external to vulva.

Patient was anæsthetized by ether, and placed upon the table in dorsal decubitus, her bowels having previously been thoroughly evacuated by oil and enema. The lacerated surfaces were thoroughly freshened by scissors and scalpel, and then approximated by three double silver-wire sutures, each suture being introduced about half an inch from the median rent, passed deeply through, and the three fastened on either side by pieces of elastic catheter. Several horse-hair sutures were introduced, to approximate more closely the tegumentary or superficial surfaces of the wound, which incline to gape as the deep sutures are being fastened. The parts were now cleansed, the knees bound together, and patient borne to bed. Towards night an anodyne suppository was administered.

March 7.—Passed a very good night; slight œdema of parts; urine drawn by catheter twice since operation. To-day tension of parts, and pain increased. P. M., ordered suppository.

March 8.—Slept several hours during night. Patient has a slight bronchitis, and the cough attending increases the pain and tension of the parts. Continued the suppositories.

March 11.—Doing nicely. Cough has subsided; also pain and tenderness diminished. Slight discharge from vagina; ordered it syringed with tepid water twice daily.

March 12.—Bowels moved by an injection.

March 13.—Wire sutures removed, and wound examined; slight ulceration from the quills; union perfect throughout.

March 31.—Wound completely healed, and being able to walk with comparative ease, left hospital. Ordered rest, and wearing of perineal bandage for a few weeks.

Case II.—Mary C., aged 42, Ireland, admitted March 13, 1872. The perineum ruptured in labor twenty-two years ago, and complete procidentia has existed nearly four years. The vaginal mucous membrane presents a dry, rough, tegumentary appearance. Micturition is extremely painful, and almost impossible, save by partially reducing the displaced organ.

March 14.—Bowels having been evacuated thoroughly, the vagina was everted, and an elliptical section of the anterior wall (measuring three inches in length and two in width at its widest part) was removed, and the edges approximated by ten silver-wire sutures, the free ends of which were secured by perforated shots. The uterus was now replaced. No anæsthetic was used in this operation. The patient was now etherized, and the perineum vivified and approximated, as in former case, sphincter not being involved. The hemorrhage in both operations was very trifling, no ligatures, torsion, or styptic being used.

March 16.—Doing nicely; sleeps and eats well; has very little pain; urine drawn by catheter *pro re nata*.

March 18.—Troubled with flatulence, also irritability of bladder. Ordered potass. bicarb. ℈j, every two hours, in flax-seed tea.

March 19.—Former symptoms relieved;

has good appetite; vagina syringed thrice daily with carbolized water.

March 23.—Deep sutures removed; good union, but severe ulceration from quills. Bowels moved to-day for the first time since the operation.

March 24.—Sutures removed from vagina; union perfect nearly throughout; about one eighth of an inch ununited.

April 8.—Patient allowed to sit up, using a T bandage; is also using vaginal injections of alum water.

April 21.—Patient discharged perfectly cured.

Case III.—Ellen D., Ireland, aged 55, admitted March 23, 1871. This patient has been married thirty years; gave birth to ten children, last ten years ago, at which time perineum suffered laceration. For five years she has suffered from irritable bladder caused by uterine displacement and vagino-cystocele, which exist in a marked degree. Pessaries were resorted to, but with little relief, since perineal support was lacking. Examination shows induration and hypertrophy of both lips of cervix, with prolapsus of bladder and anterior vaginal wall. Patient's general condition not very good.

March 24.—Patient was duly prepared, anæsthetized, and the indurated portion of cervix removed. The edges of perineum were then pared and approximated as in former cases.

April 1.—Patient has suffered much from flatus and a cough, but is now much relieved. Removed deep sutures; union of deep surfaces perfect; tegumentary edges still disunited.

April 14.—Superficial edges have united since cough and colic have subsided; patient is walking about, a T bandage being applied.

April 15.—Left hospital greatly improved.

Case IV.—Margaret M., aged 54, Ireland, admitted April 8, 1871. Patient was never married; never pregnant; never received injury to perineum, yet it is ruptured, and attended by complete prolapsus. Examination shows it to be due to ulcerating epithelioma. General health poor.

April 9.—Patient duly prepared, etherized, all suspected tissues thoroughly removed, and edges of wound approximated, as already described.

April 13.—Has suffered considerable pain, referred to back, necessitating the nightly administration of gtts. vj. of sol Magendie, hypodermically. Parts kept clean by sol. zinci chloridi, grs. ij. to aqua f.℥j. Appetite middling; tongue slightly coated, but moist. Bowels have not yet moved; urine still drawn by catheter.

April 19.—Deep sutures removed; good union in deep parts; tegumentary edges not united throughout.

April 30.—Perfect union, deep and superficial. Patient was discharged with a sound perineum. Ordered to wear the bandage, and rest much for a few weeks.

Case V.—Mary O., aged 37, Ireland, admitted August 8, 1871. Has been married seventeen years, and gave birth to eight children, the first three and the last being premature and still-born. Perineum ruptured at birth of last living child, four years ago, and prolapsus of posterior vaginal wall has existed nearly three years. The usual train of symptoms attends this case, especially rectal tenesmus.

On day of admission patient was duly prepared, etherized, and an elliptical piece removed from prolapsed posterior vaginal wall, and the edges of wound approximated in a vertical line by five silver sutures. The perineum was freshened and restored in the usual manner, four deep sutures being used here instead of three.

August 14.—For a few days suffered from flatulence, also from irritable stomach and bladder. Injections eased bowels; Vichy water relieved stomach and bladder; urine drawn by catheter; vagina cleansed daily by tepid injections.

August 16.—Deep sutures removed; parts apparently firmly united, though still œdematous, and bleed on slightest touch. Appetite still weak; ordered a milk punch daily.

August 19.—Removed sutures from vagina, also the superficial sutures from perineum; union excellent in both.

Sept. 8.—Left hospital, feeling, to use her own words, like a new creature.

Oct. 3.—Was seen at hospital; she is free from former symptoms; uterus in good position; perineum ample.

Case VI.—Ann V., aged 30, U. S., admitted September 11, 1871. Has been married six years; had one child five years ago, in the birth of which perineum ruptured. For four years uterus has protruded beyond the vulva. The symptoms, already familiar, need not be enumerated.

September 12.—Having been duly prepared as to the clearing out of the bowel, the patient was chloroformed, and the peri-

neum restored in usual manner, three deep sutures being used. She was then placed in bed. P. M. Administered 15 gtts. sol. Magendie, to ease pain.

September 18.—Removed the deep sutures; their tracks slightly ulcerated; union quite promising; bowels moved.

September 26.—Patient left hospital, suffering no pain or inconvenience, but perfectly well in every respect. Ordered rest, and use of perineal bandage.

Case VII.—Kate D., aged 38, U. S., admitted March 25, 1872. Has been married twenty-three years; has had seven children, youngest six years of age. Perineum ruptured in last labor, and soon after uterus began to descend. Complete procidentia has existed four years.

April 16.—The hypertrophied cervix having been amputated soon after admission, and the stump healing nicely by granulation, to-day patient was subjected to Elytrorrhaphy, an elliptical piece of anterior wall of vagina being removed, the object being to constrict the calibre of vagina and increase support of uterus. The edges were approximated by eight wire sutures. Then perineum was restored in the usual manner, four deep sutures being used.

May 1.—Great tension of parts; loosed the deep sutures.

May 5.—Removed deep sutures; deep union perfect; tegumentary union not perfect.

May 10.—Left hospital, wonderfully improved.

Editorial Department.

Periscope.

On the Pre-systolic Cardiac Murmur, or Mitral Stenosis.

In a Resumé on this important point, *The Doctor* remarks:—

It is not so many years since it was a common thing to hear distinguished practitioners deny the possibility of diagnosing with certainty the murmur of mitral stenosis. The past few years have witnessed the conversion of some of these doubters, and now, judging from the recent literature, the murmur is generally recognized, if not always correctly understood or explained. Although some have condemned the minute study of the differences of cardiac murmurs as an unprofitable refinement of diagnosis, we have always inclined strongly to the opinion that such refinements are so valuable as aids to the development of accurate observation, that we have devoted no small part of our leisure to the study of mitral stenosis. The lesion is, in our experience, as in Dr. Gairdner's, by no means uncommon, and its attendant physical signs in most cases clear and unmistakable. The fact that so much confusion still exists on the subject, and that one of the most recent papers on it contains a new attempt to explain the rhythm of the murmur, is sufficient to show that there is more difficulty than some have supposed in the detection of the lesion. This is due in great part to a want of clear appreciation of the varieties of murmur produced by obstructive disease of the mitral valve. Our experience has led us to the conclusion that there are at least three varieties of the murmur diagnostic of mitral obstruction.

First, as the one most commonly recognized, we would place the roughish, sonorous murmur, preceding for an appreciable period, and finishing at the first sound with a whiff-like termination. This form is loud and churning in its character, not heard much beyond the region of the apex, and frequently accompanied by a thrill which, like the murmur, precedes and runs up to the apex beat. The true first sound in these cases is short and flapping in its character, often very like the normal second sound. This is the typical murmur of mitral stenosis, and is commonly associated with a funnel-shaped adhesion of the curtains of the valve, which projects into the left ventricle. The auricular surface of the funnel is often rough, and the button-hole opening thickened at its circumference, but still capable of allowing the valves to meet by surfaces so as to prevent regurgitation.

Second, there are some cases of mitral stenosis in which this murmur is not heard, but in place of this there is a short whiff. This murmur is much shorter than the first, is soft and blowing in its character, and varies in loudness from time to time. We have over and over again watched it disappear as the cardiac embarrassment was relieved, to appear again when the circulation was again disturbed. This murmur is often overlooked, and is not to be heard except immediately over the region of the apex. It terminates abruptly with the first sound

as determined by the carotid pulse, and is nearly always associated with irregularity of the pulse. This murmur we have heard in many instances in which the *post-mortem* examination has justified the diagnosis to which it pointed.

Third, there is the prolonged murmur at the apex which Duroziez has so well described; it really consists of the first and second murmurs with the addition of a systolic murmur of mitral regurgitation. It is a triple murmur really, and always points to the association of regurgitation with the obstruction, an association common enough when there is a rigid aperture to the funnel formed by the stenosis of the mitral valve. In the cases in which this prolonged murmur is present there is often great irregularity of the heart's action, but sometimes it is quite regular. The murmur also varies somewhat in the perfection of its features; sometimes one or another of its three parts may be less distinct than the others. The systolic portion, however, is audible at the base, and can be heard towards the axilla, and in the left interscapular space. This systolic part is usually short, coinciding with the carotid pulse; it sometimes precedes the true mitral flap sound, which is delayed until the funnel above the rigid button-hole checks by its closure further regurgitation. It is this which often leads to error; by some the flap sound of the mitral is mistaken for a second sound, by others it is regarded as making the beginning of the ventricular systole, while in reality it is in the middle.

Such are the three kinds of murmur associated with mitral stenosis. Accurately speaking, the last kind, the prolonged murmur at the apex, is pathognomonic, not of this lesion, but of a more complex lesion, obstructive plus regurgitant disease. It is better to retain it, however, in connection with mitral stenosis, because by some writers it was long regarded as the only murmur characteristic of mitral obstruction, and also because the regurgitant part of the murmur is, after all, an addition depending on an accidental peculiarity of the mitral obstruction, viz., the rigidity of the button-hole aperture.

Chlorosis.

In the *British Medical Journal*, Dr. W. F. WADE sums up a clinical lecture as follows:

Chlorosis occurring in young women who have menstruated at all is commonly the result of the loss of blood by the menstrual discharge.

When amenorrhœa occurs in these persons, it is a consequence and not a cause of the anæmia. Both primary and subsequent menstruations produce on the system the same effects that would be produced by any other hemorrhage of equal amount.

Treatment is rest, diet, and steel. The latter, sometimes failing alone, may be combined with manganese, or what is often better, substitute arsenic. Constipation may be met by aloes or strychnia. When the former increases the menstrual flow, it must be omitted. If a high degree of serous plethora exists, producing vascular excitement, palpitation and congestion of the head, omit the iron and use morphia or bromide of potassium, with chloral, valerian, or stimulants in small quantities.

Aim to diminish the menstrual flow, especially where the chlorosis is increasing. Keep the patient on a couch during menstruation, giving bromide of potassium till the period is half over, and then extract of ergot. Digitalis sometimes checks the flow, and may be used when the ergot fails.

Aneurism Resulting from a Surgical Procedure.

The New York *Medical Record*, in a report of the New York Pathological Society, says:—

Dr. MASON presented the os brachii removed from a man thirty-six years of age. He gave the history as follows:—"One day, on leaving the Charity Hospital, I was informed by my house-surgeon that a man had just arrived, with a large abscess of the shoulder. I directed him to open it. The next day I was informed that the abscess had been evacuated, that a pint of pus had been discharged, but that the patient had nearly bled to death. The hemorrhage was checked with a great deal of difficulty by lint and persulphate of iron. On the following morning I found a large, robust-looking man, exceedingly anæmic, with an arm and shoulder swollen to the size of a man's thigh. It was very evident from the appearance of things that this was a case not only of abscess, but of traumatic aneurism. A few days afterwards the lint was removed, and a large quantity of fetid pus was discharged. This discharge continued for some weeks. On rotating the arm, crepitus was discovered at the shoulder-joint, and it was then supposed to be fracture of the cervical neck of the os brachii, with attendant necrosis."

On consultation it was decided to open the wound, and in case the bone was found to be diseased, to exsect it. This was done June 26, the patient having been etherized. While placing him under the anæsthetic, Dr. M. detected the head of the bone lying just beneath the clavicle. By a slight manipulation this was reduced in position. On examination with the finger in the wound this portion of the bone was found denuded and dead, and the wound being enlarged it was accordingly removed. In the course of this procedure a large quantity of coagulated blood was turned out of the sac. It was concluded that the posterior circumflex artery was the seat of the hemorrhage, as a vessel corresponding in its situation was found patulous. This was secured after a good deal of difficulty, on account of the sloughing tissue in the neighborhood. At one time the prospect of securing the vessel was so slim, and the patient was so

fast sinking, that the idea of resorting to amputation of the shoulder-joint was seriously entertained.

The patient made a very excellent recovery, and every motion of the limb was preserved, save that of raising it more than four or five inches from the side.

Therapeutics of Infantile Diseases.

We make the following extract from a report to the Kansas Medical Society by Dr. A. R. LANPHIER:—

ACTION OF MERCURY.

Mercury, whatever other action it may be supposed to possess, has undoubtedly an affinity for the glandular system, especially of the salivary glands. Instance the well known mercurial sore mouth, and in the salivation attendant on the teething of infants, I am in the habit of exhibiting a powder of calomel and sugar, in the proportion of from one to twenty or one to forty, giving frequently dry on the tongue, and I rarely find a case to continue longer than two or three days under its use. Again, in cases of infantile diarrhœa, attended with frequent greenish discharges, which I interpret to be expressive of glandular excess, I administer the same remedy, and nearly always with benefit.

ACTION OF ACONITE.

Aconite is said to act upon the nerves of the heart, affecting thereby the circulation, and controlling fever. This is probably its primary effect in the ordinary medicinal doses, but in much smaller doses, say the one-eighth to one-sixteenth of a drop, I believe it operates by an effect upon the vaso-motor nerves, for I have never seen it do permanent good in idiopathic fever. On the contrary, in simple catarrhal fever, attended or not by local symptoms in the respiratory surfaces, or digestive tract, I have frequently observed the most magical results, the little patient becoming, in course of half an hour or hour, quiet, surface cool, bathed in healthful perspiration, followed by a natural sleep and rapid recovery. At other times these manifestations are more tardy in their appearance, but in a majority of instances the progress of the cases is more satisfactory than under any other means I had resorted to. At the outset of *catarrhal croup*, nothing in my hands has ever afforded that rapid relief to the patient, and satisfaction to parents and myself, as these small doses of aconite. In the early stages of pneumonia and bronchitis I have found nothing to please me so well as these small doses of aconite combined with small doses of spirits of mindererus, and I have authority for quoting with other physicians of our town. Not long since I was relating my experience in these small doses to a very intelligent practitioner of a neighboring city, and he asked me if I had tried a teaspoonful of cold water with an eighth of a drop of nothing in it? I told him I had not; possibly I may do so. I am not prepared to assert positively that it would not be a good treatment in *pneumonia*. I have no doubt there are cases in which such medication would be available. Yet from the long continued habit of attributing good effects to the remedies exhibited, I am inclined to believe it legitimate to attribute the beneficial results to the small doses. Nevertheless, I am conscious that we cannot establish a correct system of therapeutics without first acquainting ourselves with the progress and termination of diseases, under favorable circumstances, uninfluenced by any therapeutic measures whatever.

The [illegible] of Cancer by Electrolysis.

At a meeting of the New York Pathological Society, reported in the New York *Medical Record*, January 2, 1872, Dr. NEFTEL presented sections of carcinomatous deposit removed post-mortem from a lady who had died in consequence of mammary cancer. About two years ago she noticed a hard and painful lump in right mamma. This increased, and, with the pain, extended to the axilla. These masses were removed by operation. Soon after the operation she had an attack of pneumonia, from which she did not recover until the lapse of several months. In the meantime the wound cicatrized, but the pain still continued, and extended down the arm of that side, making it almost useless. After several months she felt that the cicatrix became indurated, and from these there seemed to be a string of smaller lumps, which aroused the suspicion in Dr. N.'s mind that the disease had translated itself to some internal organ; she then insisted upon being treated by electrolysis, and the treatment was pursued, in conjunction with Dr. Bailey, of Albany. To the surprise of Dr. N., not only did the secondary tumors disappear, but the patient improved in general health. So marked was this latter effect that Dr. N. was inclined to believe that he had been mistaken in his diagnosis of internal metastasis. After several months, tumors again showed themselves in the same locality; these were treated, and likewise disappeared. Finally the cervical glands became affected, and she began to suffer from asthmatic attacks, in consequence of pressure upon the pneumogastric; these were succeeded by an attack of pleurisy, due to cancerous exudation, and she finally died delirious. At the autopsy, the liver, lungs, and cervical glands were found infiltrated with cancerous material.

In speaking of the effects of electrolytic treatment upon cancer, Dr. N. stated that he had reason to believe it would always be successful if employed before the disease had become constitutional.

Advantages of Spier's Artery Constrictor.

A number of cases in which this instrument was used are reported in the New York *Medical Journal*, February, 1872, by Dr. CHARLES A. HART. He concludes:—

In all of the cases contained in this paper it will be noticed that but two occurred which at the time of the operation presented anything like favorable conditions for the application of any method which would be likely to control the vessels permanently through their progress to recovery or death. In the first case cited, the vessels were in an extreme state of disease, and one of such a character as to excite very grave fears on the part of any surgeon for the recovery of his patient. It also furnishes a good example of the relative merits of the ligature and the artery constrictor, and demonstrating the superiority of the latter method over the former, *as secondary hemorrhage occurred from the vessel to which the ligature had been applied, while the constricted vessels remained closed.* Case II, I had hoped, would have proved another advantage, viz., by the wound closing entirely by primary adhesion. This was partially obtained, and I have no doubt would have been perfect, had not the attack of croup, which was developed the night of the operation, prevented. The cure of the case, however, was accomplished. Case III demonstrated how groundless is one of the objections urged against this instrument by some of the older surgeons, viz., that "the force employed would divide the external coat of an artery, or at least injure it so as to cause it to slough;" in this case the artery belonged to the most delicate class, and, notwithstanding it was drawn into the sheath of the instrument to the extent of between a quarter and half an inch, with sufficient force to divide and invaginate the internal coats, the external remained uninjured. Its position, also, was one favorable to any consecutive bleeding, being in loose floating tissues, and unsupported by the pressure of any dressing. How the above objection could be urged against the use of the constrictor by practical surgeons, I can hardly understand, for a moment's reflection on the anatomical construction of arteries should preclude such an objection, as every professional man of any surgical experience can hardly fail to know that the external coat, composed as it is of connective tissue and elastic fibres, is extremely tough and resistant. As to the force used in the application of the instrument, it is far less in reality than that exerted by the ligature, and which is, I may say, always much more of a cutting instrument, from the fact of the ligature being much smaller in circumference than the beak or hook of the constrictor. The ligature, again, is frequently applied with such force as to break, even though generally composed of good, firm silk, while the cutting through of a vessel by it is far from common.

The valuable practical points which this method presents over the ligature, and which, I think, are to some extent demonstrated by the cases contained in this paper, are:—

1. Its greater certainty of permanently controlling arteries in a healthy condition, as well as in extreme states of disease.

2. The wound being free from any absorbing or retaining agent, like the ligature, in which discharges can decompose, there is less liability to septæmic poisoning.

3. The wound being entirely free from any foreign body, there will be a greater probability of obtaining primary union, and which we can materially assist by hermetic closure of even as large wounds as in amputation of the thigh, by covering the entire stump with collodion.

4. Far less liability to secondary hemorrhage when applied to a vessel in its course. Should the invagination of the coats or clots give way, the current of blood will simply flow on in the old channel, and not exsanguinate the patient, as in secondary hemorrhage after the ligature.

The Causes of Decay in Teeth.

On this subject, Dr. S. P. CUTLER writes to the *American Journal of Dental Science*, March, 1872:—

Without proper physical exercise, digestion is imperfect, and in consequence every function is impaired, the secretions of the mouth becoming, as a general thing, acid in character, which causes early destruction of the imperfectly developed dentures, the teeth decaying frequently before fairly erupted.

Let us examine into the food of children at the present day. Instead of the good, wholesome, substantial food of former times, the most refined flour is used, and bolted meal, all kinds of tubers and fruits must be peeled clean, so as not to leave a trace of the mineral element on them. The dishes must be highly seasoned, and elaborate in numbers, appetizing dishes must be brought into requisition, in order to tempt the incapacitated stomach to take on what it cannot dispose of in a healthy manner. In this way the enfebled stomachs are overtasked, in consequence, half-digested food is conveyed into the bowels, frequently ending in bowel complaints and other disorders; in consequence, doctors' stuff must be taken to do what nature should do.

This poorly assimilated food has to build and repair the tissues, which necessarily does the work imperfectly, the hard tissues being the greatest sufferers of all.

The confinement within doors of children, and young females especially, and want of sufficient fresh air, and out-door exercise in our cities and large towns, where the rooms are not always properly ventilated, is another fruitful cause of badly decayed bones and teeth, which have been referred to already.

The bad and impure air of large towns, where a large amount of coal is consumed,

and a corresponding amount of carbonic acid formed and given up to the atmosphere, besides what is furnished by decomposition of filth and respiration, together with other noxious gases, has an important bearing upon the present subject.

The system of education of the fashionable boarding schools is wrong in the extreme. The poor laborers on the plantations, and mechanics that have to take constant physical exercise, with plenty of good, plain and substantial food, including the negroes of the South, all have better teeth on an average, than the wealthier and more luxuriant. One striking proof of what I have stated is, that when negro women are brought from the cotton and corn fields, to serve as cooks and waiters about the houses of the wealthy, both on the plantations and in the towns, these same negroes and their offspring have bad teeth, as a rule, all owing mainly to change of diet and habits generally, their labors being less physical than while in the fields.

Flexions of the Uterus.

Dr. GRAILY HEWITT, in the *Lancet*, gives the following definition of flexion:—

Disease of the uterus, the essence of which is a change of shape. That is, on the whole, perhaps, the best method of formulating the opinion which I wish to express, and it conveys the whole idea. In this definition it is not implied that flexion is the only thing which is important, or that it is the only condition which is or may be wrong in the uterus; but it is implied that flexion is the most important element in the matter.

As an introduction to what has to be stated later on, we may consider for a moment the anatomical relations of the uterus, predisposing, as it can be shown they do, to a change in its shape. Consider for a moment the manner in which the uterus is suspended in the pelvis. The upper part of the uterus, which is the main part of it, has no attachments, posteriorly or anteriorly, sufficient to absolutely maintain it in one position. The uterus is suspended in the middle of the pelvis, but it is suspended in such a manner that a degree of motion is allowed anteriorly and posteriorly, and there is much more motion allowed at its upper than at its lower part. It rarely moves from side to side, because laterally there are attachments which bind the uterus pretty effectually to the sides of the pelvis. And with reference to the cervix of the uterus, this is kept in its place pretty effectually by means of its connection with the bladder and the vagina at the upper part. The axis of suspension of the uterus, as it has been very properly designated, is represented by a horizontal line passing through the uterus from side to side, and about the situation of the internal os uteri. This leaves about half of the uterus above this point and about one-half below it. The lower half is more effectually fixed, and the upper part is very ineffectually fixed, except in reference to lateral motion, which is not allowed except to a slight degree. Now what are the hindrances, it may be inquired, in reference to change of position of the upper part of the uterus? That is the part with which we are mainly concerned. It is quite obvious that the broad ligaments, which are the lateral attachments of the uterus, impede lateral motion. The round ligament is an important structure. It is attached to the upper part of the uterus on its anterior aspect; and when the round ligaments are intact, the motion of the upper part of the uterus backwards is, to a certain extent only, controlled. They seem to be so placed as to be intended to prevent this occurrence. With reference to the motion of the fundus uteri forward, there appears to be very little hindrance. The bladder is the chief obstacle to anterior motion of the uterus. The bladder, when distended, prevents the fundus uteri from falling forwards; but of course the bladder is not always full, and when it is empty there is nothing to preserve the uterus in its position—nothing of a special character, that is to say. Another element in the case next to be mentioned constitutes an important hindrance to anterior or posterior motion of the fundus uteri; it is the resistance of the uterus itself. The healthy uterus is an organ having very thick walls. The cavity is exceedingly small in proportion to the thickness of those walls. It is apparent that if the cervical part of the uterus be held pretty firmly in its place, the position of the upper part will be well maintained by the thickness of the walls. And thus this rigidity of the uterus itself—as it may be termed—unquestionably constitutes a very powerful hindrance to displacements of the fundus uteri. Subsidiary to these hindrances already mentioned must be added the general connection of the uterus with the adjacent viscera by means of blood vessels, and cellular tissue surrounding the blood vessels, also the peritoneum. But it cannot fail to be observed that these subsidiary means of attachment of the uterus apply, for the most part, to the lower part of the organ, and they do not, excepting indirectly, help to fix the upper part of the uterus. The Fallopian tubes aid very little in preventing anterior or posterior motion. This very delicate adjustment of the uterus in its position in the pelvis—for it is a very delicate adjustment—is a physiological necessity. It would be impossible otherwise for the uterus to expand, and it would be impossible for it to undergo those changes of position which are involved in the existence and course of pregnancy, were it not for the fact that the attachments of the uterus are such as now described. It is the upper part which undergoes this expansion in pregnancy in order to fit it to become the residence of the fœtus, and this part is left comparatively free. But for the physiological necessities involved in the propagation of the species, the uterus would doubtless have been fixed much more firmly and with less liability to the alterations of shape and position.

We now come to consider the *causes* of flexion of the uterus. If we wish to trace the pathology of any disease, we search out its beginning; we endeavor to ascertain the point at which the healthy action passed into one unhealthy or diseased. When the disease is far advanced, it is often very difficult to determine its real etiology and pathology. Various complications have been by that time added, and various secondary effects, which mask the primary one. For this reason I just now directed your attention to the shape and position of the uterus, and the methods by which it is sustained therein. A slight failure in any one of these conditions of equilibrium is really the beginning of a flexion.

We may usefully divide the causes of flexion into two—the predisposing and the exciting causes.

One of the most important of the predisposing causes is *an unhealthy state of the body generally;* another is a previous pregnancy. These are the most important predisposing causes of flexion of the uterus; and I will say a word or two respecting each of them. The tissues of the body, imperfectly or badly nourished, are relaxed and wanting in tonicity. The circulation in the blood vessels is retarded under these circumstances—it is sluggish and imperfect; and the tissue-changes take place with greater slowness than under ordinary circumstances and in a state of health. The effect of this state of things upon the uterus is most marked: it increases its size; its circulation becomes slow; and, as a necessary mechanical result of this, flowing from the considerations which I have just laid before you, there occurs a diminution in the rigidity of the uterus itself—one of the most important agents, as I have endeavored to show, in preserving the uterus intact. In other words, the uterus becomes pliable to an unusual degree. This is a state of things which constitutes a very strong predisposition to a change of shape in the uterus. In what class of individuals do you observe such a condition as this? In young women who are growing very fast, in whom the vital processes ought to be exceedingly active, at the age of twelve to fifteen or eighteen; who are badly fed, surrounded by hygienic circumstances of a deteriorating character, especially so when confined in close apartments and workrooms. These are the conditions of life which predispose to this want of rigidity of the uterus. The other predisposing cause which I have to allude to is *pregnancy.* If the uterus has undergone the expansion and enlargement inseparable from pregnancy, there is thus constituted a predisposition to flexion, and the predisposition is created in the following manner:—After pregnancy is over and the uterus vacated, it is some time before the organ returns to its normal dimensions. In fact, it does not return to the dimensions which existed before. In round numbers, the increased size would be represented by one-fourth in the healthy uterus after normal gestation and its effects have properly come to an end. In the next place, it must be stated that the quickness and rapidity with which the uterus becomes reduced in size after pregnancy is very various. In some cases the uterus is exceedingly slow in returning to its normal dimensions. If the process goes on healthily, the uterus speedily returns to its proper size—probably within a month; but in other cases it is a considerable number of months before the uterus is found of its normal size. This involution of the uterus, as it is termed, goes on in this inactive manner in a very considerable number of instances; but even when in goes on to the full extent and with the usual quickness, the uterus is still left larger than it was before. And it must not be forgotten that the increased size affects not so much the cervix as the body of the uterus, which, as already stated, is, from its want of connection, more predisposed to a change of position. These constitute the predisposing causes of flexion. There are several others, but these are the two main ones.

Next we come to exciting causes. The exciting cause is sometimes simply an exaggeration of the predisposing ones. For instance, an ill-nourished woman becomes pregnant. There we have the two classes of predisposing causes in operation together. Here the uterus is a long time in returning to its proper size after the labor is over; the patient very soon falls pregnant again, and perhaps a third or fourth time. Thus the uterus has very little rest: it has scarcely time to recover the effect of one pregnancy before another pregnancy follows. The result is that, in following her ordinary avocations, the uterus in such a patient gradually gives way. The upper part of it, that is to say, comes to assume a position which is partly one of flexion; and when the flexion has once arrived at that point, the patient has generally no more children. She is liable to miscarriage; and if she conceives, that conception is followed by miscarriage. Most frequently she does not conceive, and the uterus is left in this flexed condition; and if it attracts no attention, it remains so and never gets cured. The case which I have just laid before you is one which shows that constant action of predisposing causes leads to the disease by itself, the predisposing causes acting by themselves; and when we get the two together we have what amounts to an exciting cause. The other exciting causes to be mentioned are of a more positive and direct character. One important exciting cause is an accidental strain or fall, such as in the following case:—A lady standing at her door is about to step into a carriage; the servant is sent to fetch something; she stands by the horse's head; the horse suddenly takes fright and starts forward; the lady holds on by the rein, and is dragged some yards. She undergoes great exertion there and then, and the result is that the uterus is forced downwards and backwards, and retroflexion of the organ is instantly originated. I need hardly say I am now giving you an actual case. Take an-

other instance:—A young lady, previously in a state of good health, but unused to much exertion, goes to a ball, and, not accustomed to dancing, dances for a long time together—five or six hours. She feels rather ill; and, to add to this, the following morning on coming down stairs, she slips and falls on her back, passing over four or five steps, and receiving a violent jerk. She experiences intense pain; and it is found on examination a few days afterwards that the uterus is acutely anteflexed. Another instance:—A lady, four days after parturition, in the absence of her nurse, rises from her bed, and walks across the room to get something. She experiences a sudden severe pain and returns to her bed. She makes light of it at first; but a few months afterwards, after undergoing a course of continuous discomfort, it is found that she is suffering from retroflexion of the uterus, which originated, doubtless, as I have mentioned.

I might multiply instances *ad infinitum* in which it was demonstrable that the starting point of the flexion was an accident. Another exciting cause of flexion of the uterus is the position of the body. It is quite certain that remaining in a constrained position daily for a great number of hours has a very important influence in the production of one of the forms of flexion of the uterus. I mean anteflexion. Young women, for instance, employed in a dressmaking establishment, and following their occupations for many hours during the day, without any opportunity of taking exercise, combined not seldom with bad living, and thus bringing into play the predisposing causes also. It is not at all rare to find, under such circumstances, that the uterus becomes anteflexed. The use of sewing machines I have observed to be followed by the same result. This is due to the position of the body. A word more in reference to pregnancy as a cause. We frequently find in practice that patients attach extreme importance as regards the commencement of their maladies to their confinements, suspecting the illness to be due to some peculiarity in the confinement itself. Undoubtedly when the perineum has been much injured that is a source of mischief, and may lead to this and other disorders; but flexion may originate without injury of the perineum.

How, it may be asked, does the fundus of the uterus descend forwards or backwards, as the case may be? It descends in consequence of the pressure from above when a sudden or forcible exertion involves putting into a state of rigidity the abdominal muscles. The viscera of the abdomen receive the pressure, and that which offers the least resistance, of course, will give way. It is a matter of accident whether the fundus moves forwards or backwards. That is determined by other conditions which I have to put before you presently.

We pass now to the study of the *varieties* of flexion of the uterus. Supported as the uterus is at each side, lateral flexion is very rare. The uterus is generally either bent forwards or backwards, constituting in one case anteflexion, in the other retroflexion. With reference to the comparative frequency of these two events, the following is, I believe, the truth on the subject. Anteflexion of the uterus is more common than retroflexion, and in the proportion of about three to two; but severe anteflexion is more rare than severe retroflexion. A consideration of the attachments of the uterus gives the clue to this. There is, in fact, less support for the uterus behind than there is in front. When the fundus gets bent backwards, it will be seen there is more room for it, and it can descend further posteriorly than anteriorly. The pouch behind is much the deeper. In front there can hardly be said to be a pouch. That is why the flexion in retroflexion is often more acute than in cases of anteflexion. You may, perhaps, ask at this stage of the inquiry, What is the difference between flexion and version? In point of fact, version very rarely occurs without some degree of flexion, nor does flexion usually occur without some degree of version. Simple retroversion, with no actual curving of the uterine canal, I do not know that I have ever witnessed, but I have seen one or two cases of very complete simple anteversion in the cases of forward inclination of the uterus.

Let me in the next place call your attention to some of the *pathological effects* of flexions of the uterus. What would be the effect upon the uterus of a bending of the organ? It would obviously be to produce a compression of the tissues of the organ at the seat of the bend. Such compression is in the nature of things inevitable. The distance between the external and the internal wall will be diminished. The diminution of the thickness of the walls of the uterus will take place to a greater extent on the concave side of the bend. There will be a diminution of the diameter at the position of the flexion, and the general result will be that there is a compressing force exercised at the middle of the uterus upon the tissues of the organ. What will be the effect of this compression? The arteries of the uterus pass into it from its sides. They come from the uterine artery, one on each side passing upwards from below. There is another supply of arterial blood from above by means of the small Fallopian branch of the spermatic artery. Were it not for this small branch the effect of forcibly compressing the uterine arterial branches would be that the upper part of the uterus would get very little blood at all. It is certain that compression, such as occurs in flexion, and is exercised on the middle part of the uterus, has the effect of materially retarding the circulation in the vessels, veins as well as arteries, traversing the body of the uterus. The result is, in effect, *a congestion of the body of the uterus*, and, in a less degree, also a congestion of the *cervical* part of the organ. In order to give prominence to this mechanical effect, and to signify its clinical importance, I have ventured to describe it under the title of "Strangulation of the Uterus." It is, I

believe, an inevitable result that the circulation in the upper part of the uterus should be in a considerable degree interfered with when compression is thus exercised upon the uterus and its vessels, the result being that the upper part of the uterus comes in the end to contain a larger portion of blood than usual. It becomes unduly heavy and larger. It becomes not only congested, but likewise unduly sensitive, to an extraordinary degree in some cases; and the congestion and undue sensitiveness constitute the most important of the phenomena, to a less degree in anteflexion than in retroflexion, but even in the former cases to a marked degree in many instances. This compression in the middle of the uterus has various effects in different cases. After a time, if the flexion is not very acute in degree, the uterus may become habituated to it, and flexion becomes after a certain interval less embarrassing to the uterus. The uterus acquires toleration to a certain extent, and then we do not see the patient. But when it does not acquire that toleration, or when, as frequently happens, the malady increases, we have an opportunity of witnessing these effects; the fundus uteri is found sensitive, swollen, and tender to a degree; the patient is in a state of discomfort which hardly any physical condition of other organs of the body can exceed. The compression of the uterus is a phenomenon to which I attach great importance as a feature in the natural history of these cases. Various writers on this subject take views on the matter which differ considerably from those which I have just laid before you. It is held, for instance, that this congestion, or so-called inflammation, of the upper part of the uterus is not the only primary evil, but the cause of the pain in these cases of flexion; while the flexion itself is of secondary consequence. I would wish to speak with all respect of the opinions of others; but I must say that my experience has led me to take a very opposite view. The inflammation or congestion of the upper part of the uterus is generally considerable. It is only so far primary in the degree and in the manner I have already pointed out in speaking of predisposing causes of flexion. Thus a congestion of the upper part of the uterus, which we may suppose to exist to begin with, may, in the first instance, produce flexion. Having done that, the flexion will react upon the congestion, and will increase it; and, unless cured, it will prevent the cure of that congestion. I do not at all deny the importance of this element of fullness of the blood-vessels of the upper part of the uterus—very far indeed from that; but the relation which exists between the two things is, I believe, the one which I have endeavored to lay before you. This view influences the treatment in these cases very decidedly indeed; for whereas others are disposed to treat the affections, at all events in the first instance, by blood-letting and leeches—a treatment which has for its effect removal of congestion—I submit that such cases should be treated by going more to the root of the matter, viz., by an alteration of the shape of the uterus, which is the means of keeping up the congestion. And this method of treatment I have had the greatest reason to be satisfied with in practice.

Early Puerperal Eclampsia.

Mr. Lawson Tait, in the *Lancet*, gives the following case:—

J. C——, aged twenty-seven, the mother of two children, and to whom two miscarriages had occurred, applied at the hospital on February 12th. She complained of pain in the back, occasioned by a fall. The cause of the fall she asserted to be a sudden loss of consciousness, which lasted for some time. She stated that she was within a month of her full time—a circumstance which led to the examination of her urine. This was found to be intensely albuminous, and there can be no doubt that the fall was occasioned really by a uræmic convulsion. She was ordered fifteen-drop doses of the tincture of the muriate of iron and half a drachm of nitric ether in an ounce of water, every four hours, and advised to call in medical assistance at the earliest indication of labor. At three o'clock on the morning of the 15th she was found to be in labor. The pregnancy had not, however, advanced to the sixth month. The urine was found to be only slightly albuminous, but, as a matter of precaution, she was kept under the influence of chloroform for about two hours. Throughout the 16th, 17th, and 18th, the uterine action seemed in abeyance, but on the 19th she was delivered of a putrid fœtus of about the fifth month. Her labor was superintended by Dr. Poncia, who reports that there were no indications of eclampsia, and that she has recovered well.

Remarks.—We have here a very unusual condition of puerperal uræmia occurring early in pregnancy, and in a multipara, causing, as usual, the death of the fœtus, and discovered by the merest accident. Had the patient gone untreated, there is every reason to believe that a most serious risk of her life would have occurred. Sir James Simpson pointed out the value of the combination of iron and nitric ether, and this case seems to have been one in which its efficacy was well marked.

Gleet.

Dr. J. B. Woodson, in the Kansas City *Medical Journal*, contends for local treatment by actual contact with the diseased surface and external counter-irritation.

He has used for the last three years the deep injections. These can be best applied by means of a rather large sized catheter, pierced at the small end with small holes for the space of two and a half or three inches, and having the eyelets closed. This instrument being introduced, the injection is thrown in by a strong rubber syringe with a long beak large enough to fit tightly in

the end of the catheter. This instrument the writer has found to be much better than the catheter-syringe. The disease being reached by these means, it is as easily controlled as it could be in any other situation. He has been so fortunate as to effect cures in cases that had baffled all the skill and patience that had been brought to bear upon them.

R—— F—— came under treatment July 10, 1869; had gleet following a gonorrhœa contracted while in the army in 1862—*seven* years previously—had had more or less discharge ever since, but had never to his knowledge contracted a fresh clap. This case was treated by the method above mentioned, and also by a blister of cantharidal collodion applied externally to the whole length of the under side of the urethra; this treatment is rather severe, but it has generally been found to be effectual.

The injection used through the catheter was at first nitrate of silver, grs. 5 to the ounce of water. After a while it was changed for tinct. of iodine, dr. 1 to the ounce of water. As constitutional treatment the patient took tinct. of chloride of iron and tinct. of cantharides. This case yielded slowly. A great many different remedies were employed; but finally, at the end of three and a half months, the overjoyed patient pronounced himself entirely well, and he has never been troubled with the complaint since.

C. P. S. came under treatment January 10th, 1870. Had had gonorrhœa very often; did not remember how many times; had had a discharge, variable in quantity, for nearly three years past; had tried all manner of injections, and had taken "a barrel of copaiba," all of which had had only a temporary effect; he was then "as bad as ever;" and also had spermatorrhœa. The treatment was commenced by blistering the perineal portion of the urethra, and as soon as the resulting soreness permitted, the catheter was brought into requisition and a mild solution of tincture of iodine, dr. ½ to one oz. of water, was injected; this was followed by nitrate of silver, and subsequently by Monsel's solution, and in two months the case was discharged—cured.

The treatment is rational, and offers a vast advantage over any other of which he is aware. One great point is *patience*. The surgeon must not expect to take these cases by storm and to cure long standing disease in a very short time. There are very few cases that will resist the treatment if it is fairly applied. In a record of over twenty-five cases treated in this manner there is but one failure, and that was owing to the dissipated habits of the patient. The blister over the course of the urethra is especially recommended, even if it should confine the patient to bed—if it should, all the better for him. The cardinal point in the treatment of this disease is, that it is just like a similar disease of mucous membrane in any other accessible situation, and is, *mutatis mutandis*, amenable to the same modes of treatment.

Concealed Præ Partum Hemorrhage.

Dr. J. PARSONS, in the *British Medical Journal*, reports as follows:—

Case I.—The patient was the wife of a weaver; a strong and healthy primipara, arrived at the seventh month of gestation. On February 8th she was seized with faintness and a feeling of painful distension of the abdomen; but, as no labor-pains occurred, no treatment was adopted by the midwife beyond keeping the patient in bed. As, however, the pallor and distension increased, I was summoned on the 12th, and found the woman exhausted and exsanguined to a remarkable degree. Upon examination, although there had been no pains or discharge, the os uteri was flaccid and dilatable, the membranes unruptured, and the face presenting. I had at the time no idea of the nature of the case with which I had to deal; but possessed with the dread instinctive in an accoucheur of seeing my patient die undelivered, and miles away from instruments or professional assistance, I introduced my hand into the unresisting uterus, and immediately delivered the small dead fœtus by the feet. Finding the abdomen but little diminished in size, I thought there was another child to be born, and plied the woman freely with brandy and ergot; and after a while had the satisfaction of finding the placenta thrown off. The cause of danger and perplexity then became evident, for I removed from five to seven pounds of old, black coagula. The uterine surface of the placenta showed that it had been detached over its larger part. The woman slowly recovered to a great extent, but was ever afterwards an invalid, and remarkable for her extreme pallor.

Case II occurred to one of those unhappy individuals whose bairntime (to use a Scotticism) was a catalogue of disasters. She had arrived at the eighth month of her eleventh pregnancy, when she was, at 4 A. M., while lying quietly in bed, seized with sudden deadly syncope. As she lived close to my house I saw her in a few minutes, and, recognizing the nature of the case, I examined, and found the head presenting and the funis prolapsed. Being thus able to assure myself that the child was dead, and knowing from former experience that to deliver the patient with forceps was a work of time and difficulty, I did not hesitate to resort immediately to craniotomy, and, after giving ergot, to remove the placenta, and a large mass of coagulum which appeared to be of recent formation. The patient recovered, and had children subsequently.

Case III.—This patient is the wife of an innkeeper living four miles from my house, and was expecting her seventh confinement in November last. For four days she had been observed to lose her color, and complained of hardness and tension of the abdomen, but had continued to move about and attend to her household duties. On the afternoon of the 19th she fell suddenly in her kitchen, and was for a long time unconscious. When she was carried to bed a

slight discharge of blood was observed, and I was sent for, being told to come directly, as she had had a fit. When I arrived she had become conscious, but was tossing about faint and pulseless, with no labor-pains, but a slight sanguineous discharge from the vagina. On examination I found the os about the size of a shilling, occupied by distended membranes, but very hard and resisting. I immediately sent to my son, Dr. Parsons, asking him to bring various instruments, and intending, as the urgency of the case seemed increasing every moment, to deliver as soon as he arrived. As, however, by reason of distance, a considerable time must necessarily elapse, I determined to do something; and so I ruptured the membranes, and gave at once two drachms of the liquid extract of ergot, repeating the dose in half an hour. Fortunately, these means were successful in controlling the hemorrhage; and on my son's arrival the aspect of affairs had so much improved that we considered it right to wait a while, and watch for the issue. About midnight a laboring-pain came on, and the woman was delivered naturally about 2 A. M. The child had been evidently dead for some days, and the placenta was followed by a great gush of fluid blood, and many pounds of old clot. The woman is still suffering from exhaustion and bloodlessness, but will, I trust, ultimately recover.

The cause of the accident of which I have been speaking is, to me, obscure. In neither of these cases had there been any overexertion, nor had either of the patients been exposed to any of those shocks of body or mind which we are accustomed to see followed by hemorrhage and premature birth. In the first and third cases the pallor and painful distension showed that a moderate discharge of blood had been taking place between the placenta and uterine walls for some days, before a sudden and unaccountable increase occurred, and produced the alarming symptoms already described. Although the issue was fortunate in these instances, yet I need not tell you it is by no means always so, two or three fatal cases having occurred within my own knowledge. In the last case, my distance from home led me to adopt measures which fortunately proved successful; but, looking at the tendency to sudden increase of symptoms, I would not voluntarily run the risk of delay, but should make it a rule, where I had reason to believe that subplacental hemorrhage was going on, to induce labor and complete the delivery of the patient by the speediest method suitable to each particular case.

I do not know any condition likely to cause difficulty in the recognition of this accident. In the second case, the sudden and complete collapse and violent pain might at first have led to a supposition of ruptured uterus or abdominal pregnancy; but the round, well-defined uterus, hard as a cricket-ball, and perhaps the absence of tenderness, would at once clear up the difficulty. In neither case did I observe any diseased condition of the placenta likely to account for its separation from the uterus, though the appearances plainly indicated that such separation had taken place to a very large extent.

Reviews and Book Notices.

NOTES ON BOOKS.

——The American Republication of the English quarterlies and Blackwood's Magazine, by the Leonard Scott Publishing Co., 140 Fulton street, New York City, deserves the support of the reading men of our country. At the singularly moderate price of $15 a year, one can provide himself with Blackwood, the Edinburgh Review, the Westminster Review, the London Quarterly, and the British Quarterly. A discount of 20 per cent. is allowed to clubs of four or more persons.

BOOK NOTICES.

Clinical Charts. By W. W. Keen, M. D. Turner Hamilton, Publisher, Philadelphia.

Perhaps nothing more practically useful to the busy physician, for his daily memoranda of cases, has been offered than these little charts. We have a series of thirteen outline figures, showing every portion of the body, and a tabulated diagram for the respiration, pulse and temperature. A case in all its salient points can thus be rapidly sketched, and from day to day a glance shows the changes that have occurred. We most cordially commend them to the profession, and hope by their valuable aid to obtain a vast improvement in the records of practice on the part of the brethren, whether teachers or private practitioners.

AMERICAN MEDICAL ASSOCIATION.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

Wm. B. Atkinson,
Permanent Secretary.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 3, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

REMARKS ON THE CORRELATION OF FORCES.

The theory of the metamorphosis of force, brought so prominently into notice in the last decade, and which plays so important a part in modern physiological speculations, has probably been accepted too readily and too completely. It is a rare event in the history of science that any one theory flings wide open the doors of nature's arcanum, and as a rule, when any theory or theorizer pretends to do so, the claim turns out to be deceptive.

We have watched with interest the intense anxiety—for this is the proper term—manifested by many physiologists and naturalists to reduce all vital phenomena to manifestations of force under some of its protean forms, and all force to forms of motion. It is time that physicians and physicists learn that this theory of correlation, while true enough of certain secondary forms of force, is *not* true, indeed is entirely untrue of the higher and primary forms. And secondly, it is true they should learn that there are various manifestations of power in the universe which arise from a principle wholly outside of mechanical force, which cannot be explained by any theory of conversion, and which point to an existent and potent something which is certainly neither matter nor force in any of their forms known to us, and cannot be resolved into them. On the first of these points we shall now make some remarks, with the intention of merely illustrating the course of argument which opposes the ordinary theory of correlation.

Among primary forces are recognized, gravity, cohesion, chemical affinity, and magnetism. These forces are persistent in the nature of matter, they are independent, and they are unchangeable. Gravitation, for instance, is not motion, nor the result of motion. It differs irreconcilably from the other primaries in that it acts instantaneously everywhere. Arago estimated that if it acted by emitting a traveling force, its velocity must be not less than fifty million times that of light.

To explain the apparent cessation of motion in rest, philosophers have invented the fiction of "latent force." There can be no such thing as a latent force. The true solution is that force is not motion, nor are they convertible terms. The mathematical laws under which they act are radically dissimilar, and on the other hand we are surrounded by incalculable forces constantly resisting solicitations to motion. The forces at rest in the universe far exceed the forces in action. The tendency of the universe is toward rest; toward a static and not a dynamic condition. Force expressed in motion is, therefore, not forever the same, as has been so often stated; and its alleged conservation, in the common acceptance of the term, is a dream.

Strike out the single attribute of elasticity from matter, and the whole theory of the conservation of force, in any form, falls to the ground. True, so far, all matter that we know anything about has this quality of elasticity. That it is essentially and necessarily inherent in matter, however, there is no proof and no theoretical likelihood.

Force at rest, therefore, presents us the example of a positive power, existent, ready for action, but without *phenomenal* existence; a substance, if you please, without attributes. Gravity shows us a force in action, manifesting its phenomena without reference to space or time, independent of these attributes. Can we carry these somewhat abstruse speculations a step forward and glean from them any hints as to the character of *vitality?* This question we shall touch upon next week.

Notes and Comments.

Opium Smoking.

The Lowell, Mass., *Journal* of the 22d has a letter from Foochow, China, giving these interesting facts about opium:—

A large portion of Middle China is devoted to the cultivation of the poppy; and already the English and American merchants are complaining that their profits are diminished by the rapidly increasing product of the Chinese drug.

Intelligent Chinese inform me that the number addicted to opium smoking is rapidly increasing. All classes are alike guilty of the vice, and in some cases entire families are ruined, both physically and financially, by the use of the drug.

This is an aqueous extract made by first dissolving the crude opium in water and steaming, then carefully boiling. The impurities, such as fragments of leaves, sticks, etc., are skimmed off, and this is continued until it has a consistency and appearance resembling tar. The prepared opium represents about twice its own weight of crude opium drug. It is retailed to the smokers, who carry it in small boxes made of buffaloes' horns.

The implements used in smoking are the pipe, a small lamp, and a flattened wire. The pipe is made of some heavy wood, frequently of ebony, mounted with silver trimmings. They are from one to one and a half feet in length, and from one to one and a half inches in diameter. The bowl of the pipe is made of earthenware, and has only a small aperture to receive the opium.

The smoker reclines on his side, and, if wealthy, he has a servant to hold his pipe, hand him his opium, and fan him. A quantity of opium about the size of a pea is collected on the end of a wire, placed in the bowl of the pipe, and ignited by being brought into contact with the flame of the lamp. The smoker inhales it in two or three whiffs, and it is retained in the lungs as long as possible.

The amount consumed by the habitual smoker is quite surprising. A quarter ounce is daily used by hundreds, and in some cases he believes it reaches an ounce.

Treatment of Sunstroke.

We notice that the recommendation of Dr. Richardson (of London) to bleed in certain cases of sunstroke, where there is venous congestion, has been quoted by a number of newspapers, and credited to the senior editor of this journal. Our Periscope department contained this recommendation of Dr. Richardson, but we take this opportunity to say that, in our opinion, its applicability is extremely limited, and very rarely occurs in this country. The general treatment of sunstroke must be based on entirely different principles.

A Pinching Shoe.

Some time since a correspondent in Maine sent us the advertisement of a quack in that State who advertised "horse-virus" and "cow-virus," on which we made some comment. A physician near Boston, it seems, concluded that we meant *him* (why, he best knows), and induced the editor of a medical monthly in that city to forget so far the ordinary rules of courtesy and respect for correctness of statement as to admit a note charging us with "blackmailing," etc. Any inquiry at all would have satisfied the editor in question how unjust and unfounded was his opinion.

Extract of Beef.

The English Consul at Montevideo, in his report on the trade of Uruguay, says that the violent displays of party feeling in that republic paralyze its resources, and destroy its prospects. As an illustration of the results derived from the intelligent practical employment of capital, the Consul gives the case of the establishment at Fray Bentos, on the Uruguay River, of the factory for making Liebig's Extract of Meat. During the eight working months of the season of 1871, this manufactory exported 570,000

pounds of the essence of meat, derived from the slaughter of 122,075 cattle, and valued at $1,650,000. The company in addition had also exported 6,252,000 pounds of jerked beef, 300,000 horns, 124,000 hides, 1000 tons of bones, 2000 tons of tallow, 25 tons of hair, and a great variety of miscellaneous products. 3000 tons of salt were used, and 3000 tons of coal were consumed. Fifty-two ships are employed in the exclusive transportation of the products of the factory.

Inoculation of Small-Pox by Skin Grafting.

In a recent discussion on skin-grafting in the Berlin Medical Society, Herren HAHN and ZULZER referred to an instance recorded in the *Deutsche Militair-arztlich. Zeitschrift*, in which portions of skin for grafting were taken from the amputated limb of a woman in whom, the day after the operation, the eruption of small-pox appeared, and proved fatal. One of the four patients on whom the skin was grafted had small-pox, but in a mild form. He was, however, a man of intemperate habits, and died, according to Herr ZULZER, of pneumonia.

Hydrochlorate of Ammonia.

Dr. Spencer Thomson says, in the *British Medical Journal*, that he has found this, one of the most efficient remedies in portal dropsy, in scruple or half drachm doses, tolerably diluted, every six or eight hours.

NEWS AND MISCELLANY.

Patents Issued.

List of Medical and Surgical Patents issued from the United States Patent Office to United States Inventors, for the week ending June 25, 1872, and each bearing that date. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C. :—

Medical Compound—John D. Doyle, Rochester, New York.

Medical Compound — Charles Goffinet, Leopold, Indiana.

Nasal Douche—Wm. B. Snyder, Bridgeport, Connecticut.

THE Indians in California are learning the emotional insanity plea in extenuation of their little irregularities. A man in Trinity Centre, California, was recently shot at by a presumedly friendly Indian, and upon demanding the cause, the Indian bounded off with the rifle, crying out, "Me heap crazy! Me too much crazy! Me too much crazy!"

Honors to Boerhaave.

The city of Leyden, Holland, has just inaugurated with great pomp a statue of Boerhaave, the great naturalist and physician, in presence of a vast multitude. A deputation from the Academy of Belgium attended, and the flags of that country were seen mingled with the Dutch colors. The monument is 11 feet 8 inches high, and stands on a pedestal of ten feet from the ground. The deceased is represented in his professional robe, with a book in his hand, and seems to be either beginning or terminating a lecture.

Treatment of Inebriates.

A select committee of the British House of Commons has been taking evidence in regard to habitual drunkards, and, according to a correspondent of *The Leeds Mercury*, the committee have reported unanimously in favor of establishing reformatories for patients belonging to the upper, middle and lower classes. Persons are to be admitted to these, either on a voluntary application, or by order of a court of inquiry, or on a committal by a magistrate in petty sessions for a fixed period. Stringent regulations and close inspection of the reformatories are to be enacted.

A Philadelphian Promoted.

Dr. Charles S. Turnbull, son of Dr. Turnbull, of our city, has just been appointed Resident Assistant Surgeon in the New York Ophthalmic and Aural Institute.

The Cholera.

Asiatic Cholera is reported to be raging at various points on the northern coast of the Black Sea and at Odessa, and orders have been issued to erect suitable hospitals for persons who may be attacked with the disease at that port. In the district of Kiev, situated along the river Dnieper, there have been since the commencement of the epidemic 2328 cases of cholera, of whom 1032 died and 715 recovered, leaving 531 patients under treatment. A quarantine of ten days has been ordered at Constantinople on all vessels arriving from Russian ports.

FOUR cases of cholera are reported to have been recently discovered at Constantinople on board a British steamer coming from Russia. Stringent precautionary measures have been ordered in consequence.

A LETTER has appeared in the Washington, N. J., *Star*, signed Joseph S. Cook, M. D., stating that the writer has suffered an "unjust, cruel and malicious" imprisonment in the New Jersey State Lunatic Asylum, calling attention to its present official management, and urging the necessity of a thorough investigation into the affairs of the institution.

An ingenious apparatus has been invented by a French physician, by which the heart is made to register photographically its own pulsations. Such, it is said, is the peculiarity of the apparatus, in its adaptation to different uses, that it may be modified so as to register the variations of the respiration, the irregular action of coughing, and similar physiological phenomena.

The Prussian Government publicly calls attention to the presence of trichinæ in hams imported via Bremen from the United States, warning purchasers to abstain from them, and threatening the sellers with criminal proceedings.

Dr. Henry Sheldon died at Dorset, Vt., on Tuesday week. He was for thirty years a practicing physician at Rupert, and represented Bennington county in the Senate, with the late Governor John S. Robinson.

Persons who have lived many years in India say that the heat of the present summer in America is more oppressive than anything they have ever experienced near the "coral strand."

Potash salts are essential to the assimilation of plants; without them starch is not formed in the chlorophyll granules, and the weight of the plant remains constant as in pure water. (Prof. Nobbe.)

Professor Wanklyn states that filtration of water through beds or layers of porous material suffices to destroy any albuminoid dissolved in the water, converting it into ammonia.

The fungus which grows on the calcareous rocks of Florida is said to possess narcotic properties, and to be used by the natives to some extent as a substitute for tobacco. (Dr. Isidor Wells.)

Dr. Casper Wister has been appointed an Inspector of the Philadelphia County Prison by the Supreme Court—a most judicious selection.

The trustees of the State Lunatic Hospital, Mass., have appointed Dr. Bernard D. Eastman, of Washington, D. C., as superintendent, in place of Dr. Bemis, resigned.

A man, at Louisville, recently recovered $100 damages from a chemist, for the sufferings caused by a mistake of the latter in putting up a prescription.

The posting of placards of quack medicines has been prohibited in the streets of Chicago.

In removing the bodies from an old burying ground to the new cemetery in Le Roy, N. Y., recently, the remains of a lady about sixty years of age, who had been buried nearly twenty years, were found in a complete state of petrifaction, with the hair perfectly preserved.

Dr. Calvin Cutler, author of Cutler's Physiology, died recently at his home in Warren, Mass., after an illness of only two hours.

A dentist at Peoria, Ill., announces, with candor, that he extracts teeth "with great pains."

NOTES AND QUERIES.

Medical Legislation.—Messrs. Eds.: Does the legislative enactment which you presented to your readers in the Medical and Surgical Reporter, June 15, 1872, prohibit a regular practitioner from delivering lectures on medical subjects? Or does it require such a member to take out a license for the use of the county? P. J. K.

Reply.—The law does not prevent a practitioner from delivering lectures in the county where he resides, and where he is in practice.

MARRIAGES.

Ewing—Arrell.—By Rev. Jacob Coon, June 25, at the residence of the bride's father, James B. Ewing, M. D., of Uniontown, Fayette county, Pa., and Miss Effie, second daughter of Mr. D. B. Arrell, of Whiteside county, Ill.

Raymond—Coles.—At the residence of the bride's parents, No. 51 West Twenty-fifth street, July 15, by Rev. R. S. McArthur, E. H. Raymond, D. D. S., and Therese M. Coles, all of New York.

Rodgers—Watson.—In Bedford, Pa., June 20, by the Rev. R. F. Wilson, Dr. Joseph G. Rodgers, of Madison, Indiana, and Miss Margaret S. Watson, of Bedford.

Stilley—Albertson.—By Rev. J. C. Boyd, June 25, H. M. Stilley, M. D., and Annie M. Albertson, both of Bethel, Pa.

Tuft—Moore.—On July 10, by Rev. J. S. Cook, at the parsonage, No. 2013 Fitzwater street, Philadelphia, R. H. Tuft, M. D., and Miss Anna R. Moore, both of Elkton, Md.

Townsend—Blodgett.—In Newbury, Vermont, July 4, by the Rev. S. L. Bates, Dr. Henry M. Townsend and Miss Isabella Blodgett, both of Monroe, N. H.

DEATHS.

Cowley.—July 16, of cholera infantum, Lizzie D., infant daughter of Dr. D. and M. M. Cowley.

Everett.—In Philadelphia, July 13, of pneumonia, Newman Everett, M. D., in the 81st year of his age.

Higbee.—July 16, Daniel W., son of Rebecca and the late H. H. Higbee, M. D.

Hubbard.—In Springfield, Vermont, July 12, Dr. Calvin Hubbard, aged 77 years.

Rae.—At the residence of Mr. R. W. Cameron, Clifton, July 12, John Rae, A. M., M. D., a native of Aberdeenshire, Scotland, in the 77th year of his age.

Patterson.—At Altoona, Pa., July 15, Thomas R. Patterson, M. D, of New Orleans, La.

Taft.—In Hancock, Vermont, June 28, Harry Arthur, son of Dr. A. H. and Louett M. Taft, aged one year.

THE

MEDICAL AND SURGICAL REPORTER.

No. 805.] PHILADELPHIA, AUGUST 10, 1872. [Vol. XXVII.—No. 6.

Original Department.

Communications.

THE LATE EPIDEMIC IN HARRISBURG, PA.

By E. H. Coover, M. D.,
Of Harrisburg, Pa.

About the middle of December, 1871, diarrhœa became prevalent in our city and surrounding neighborhood. We soon observed something peculiar in the manner of attack and in the course of the disease. All cases did not begin alike, different patients exhibiting different symptoms, and the disease pursuing a different course; yet we could not fail to observe a striking similarity throughout. Some patients experienced fearful cramps before the diarrhœa set in; others were free from pain till after the diarrhœa had commenced; others, again, would have diarrhœa for a week or ten days, became very much debilitated, and experienced no pain. As a general thing, however, patients were troubled with more or less pain in the stomach and bowels till they were convalescing.

We occasionally met with a dysenteric complication; in such cases there would be much uneasiness in the lower bowels (tenesmus), with some blood mixed in every stool. Nausea and vomiting likewise attended many cases, and were in some instances troublesome to control. Although a marked difference was observable in many of the first symptoms, in the nature and character of the stools there was none. All had copious stools pouring from the bowels, of a milky and soot-like appearance, emitting an intense smell differing from anything heretofore experienced in my practice. Even the escape of wind from the bowels, which was a noticeable feature in every case, rendered the atmosphere of the room intolerable. The abdomen was not tympanitic, yet there was a great deal of flatulency, which continued for several days after the stools had become natural in appearance and consistency. The patient seemed to have but little control in the lower bowels. When a disposition to stool was felt, nature's call had to be obeyed or the stool would pass involuntarily. Many patients on waking up in the morning discovered that they had stooled while in an unconscious state, yet would not seem very sick, and perhaps go about their usual avocations during the day. It was not safe to urinate unless prepared to stool, and *vice versa*, as there was little control over the parts. In several instances I was compelled to use the catheter for several days, whilst others were relieved by a sitz-bath. There was in nearly every case an unusual weakness experienced in the muscles of the abdomen, hips and thighs; this was a very marked symptom, no matter how mild the attack. The number of stools differed very much in different patients, ranging from ten to forty every twenty-four hours.

Treatment.—Our treatment consisted in rest, diet, and restoring the functions of the liver; this accomplished, the case was comparatively easy to manage. I first prescribed some calomel and morphine every two hours for twelve or fourteen hours, then followed with castor oil, one tablespoonful, laudanum, ten drops, this to be repeated every two or three hours until the bowels

were moved, after which I generally administered small doses of sulph. morphia in solution, which seemed to quiet the bowels, ease the pain, and allow the patient rest. This dose repeated as often as the patient experienced pain in the bowels, would arrest the stool, and I found that if held so for twenty-four or thirty-six hours the stool would be of natural consistence and appearance. In cases attended with great relaxation, we employed astringents, such as tannic acid with opium, or catechu and kino with tr. of opium, etc., which proved very efficient in many cases. I also employed, with the most gratifying success:—

R.—Syrup of ginger,	f.℥iij.
Tr. of opium,	f.℥j.
Oil of cloves,	gttsxxv.
Oil of cinnamon,	gttsxxv.
Syrup of rhubarb,	f.℥ij. M.

Dose—One dessert spoonful every two or three hours. This remedy seemed to ease the pain, check the action of the bowels and allay the sickness at the stomach that accompanied so many of the cases. Stimulants did much to insure the speedy recovery of the patient. Tonics, such as mur. tinct. of iron, and quinine, did much to build up the patient, and bismuth sub. nit. would always control acidity of the stomach. When the lower bowels seemed to be the seat of the disease, and the patient suffered much distress, I found warm water injections to allay and quiet irritation for twenty-four or thirty-six hours; in many instances a radical cure was effected by the use of this remedy alone. In other cases I used injections of sulph. of zinc and laudanum with starch gruel. Suppositories made of opium and acetate of lead would often quiet the bowels for a period of twenty-four hours, and greatly benefit the patient.

Diet.—We allowed nothing but a binding diet; solid food seemed like poison to the stomach for several days. Brown flour soup, oyster soup, with grated crackers, toast and milk were well borne and used freely. While suffering from the disease myself, I found that my stomach would reject an oyster but retain the soup; I enjoyed a good appetite all the while, rested well at night, and attended to the medical wants of my patients during the day; this, however, could not be done where the diarrhœa was attended with the abdominal pains.

As to the cause that gave rise to this epidemic in our midst, there is still much controversy. I am not of the opinion, however, that it was the result of impure water, because careful investigation has disclosed the fact that our water is as pure as that usually obtained from reservoirs. I am convinced that it was an atmospheric disease.

ON RETENTION OF URINE.

Read before the Meigs and Mason Academy of Medicine, 16th May, 1872,

By A. L. Knight, M. D.

Simple retention of urine, to the close observer at the bedside, is presumed to be easily and readily recognized. Yet this is not the exact truth. The disease is not always so well marked with prominent symptoms as even creditable authors would have us believe.

Owing to the susceptibility of the bladder to distend by degrees to enormous dimensions, with comparatively little pain, at least where a portion of the renal secretion is voided, or even dribbled away, the vessel having arrived to a certain degree of distension, often becomes anæsthetically paralyzed, and the suffering, which may or may not have been very acute and agonizing in the initiatory stage, by degrees comes to be tolerated. This state might continue an indefinite period, supposing a moderate discharge of urine meanwhile to be going on. But upon complete retention, the organ would necessarily become excited by the acridity from the decomposition of its contents, when pain would be provoked by or from the double source of irritation, or rather inflammation, and the continued distension of the organ, thus rendered highly sensitive. The accumulating fluid and evolved gases would bring the true state of the case prominently before us. Yet possibly it still might be hid or modified by the natural tolerance of the over-taxed vesicle, until the case is beyond remedial aid.

The extent to which this organ has been known to distend is almost incredible. Instances are not wanting, if we may credit the records, where this condition of the bladder in an uninflamed state has been mistaken for abdominal dropsy, and in several instances actually punctured through the abdominal wall, under this mistaken diagnosis, where the bladder has been found to contain from twenty to thirty pounds of fluid, or even greater. These cases, so reported, of course could not elicit our belief

did not their histories, so far as given, inform us that in all there was invariably slight micturition. This imperfect or partial voiding of the urine is doubtless the cause of practitioners making these unpardonable blunders, under the impression that the scanty flow is due to inordinate or lessened renal function. I have no doubt that similar blunders are frequent at the present day.

The voiding of the larger portion of the secretion does more than simply lull the apprehensions of the attendant; it doubtless prevents septicamia within or arising within the bladder, and perhaps also uræmia. This is the only theory that I can offer in these extraordinary and prolonged cases of retention; and admitting the fact of the existence of such cases, it is to my mind questionable, unless they have a partial voiding of the urine. Should these be considered partial retention? If we so regarded it, I cannot see that it would comfort us; for they require no less promptitude in their investigation and treatment. Besides, the clinical experience of the profession shows that all and every form of ischuria is fraught with danger; and that which should strike us with apprehension is that this condition has its threatening attitudes throughout its various phases and forms; the patient being *in articulo mortis*, as it were, until relief is had.

The treatment for the immediate relief rests almost entirely upon an efficient use of the catheter. Some precede this with bougies of greater or less size, as the case may require. I cannot say that I am partial to this latter mode of treatment. The catheter employed in most cases, and recommended by modern surgeons, should be metallic, and, I might add, of large size, unless the ischury be from stricture, when perhaps small ones, or bougies, would answer better.

I do not propose to discuss the various manipulations necessary in the special use of the catheter in these cases, presuming that all are well versed in that; but the preference for the silver catheter is easily seen, when we consider the multiplicity of causes that enter into the production of this disease; for instance, tumors arising contiguous to the urethra may so distort it that an ordinary flexible catheter would as likely bend upon itself as to bend in adaptation to the crooked or distorted canal. If it be stiffened with a wire, and manipulated, as you will have frequent necessity, there is danger of thrusting the wire through the apex of the catheter, and injuring the parts before you are aware of the mishap to your catheter. In old subjects, perhaps, enlargement of the prostate is the most frequent source of this affection. If I remember rightly, Professor Gross remarks that the enlargement of either lobe of this gland will induce retention, and that where but one lobe is the seat of enlargement, the canal will be flexed correspondingly to the enlarged lobe.

I do not know that the above quotation is correct, not having Professor Gross' book on the Urinary Organs at hand. However, I believe the proposition is true; and it is well to bear this fact in mind when manipulating for relief. I think the above-named surgeon very properly recommends a suspension of the small force used in introducing the instrument when it meets with resistance at that point of the urethra, and proposes that the left index-finger be introduced within the rectum to the prostate gland, so as to guide the point of the instrument in its further introduction.

I am satisfied that, for want of this precautionary procedure, unfortunates have suffered the consequences of rude practice, if not irreparable injury. Your essayist has the stigma of one of these incautious proceedings, in which his patient lost a considerable quantity of blood, besides the provoking of an unnecessary amount of pain and inflammation, the sequence of which I need not here state.

Another very necessary item in the treatment is the complete emptying of the bladder, and this can only be done, especially where any prolapsis of the organ exists, by depressing the point of the catheter, and placing the patient upon his abdomen. I have seen old and broken-down subjects become uræmic, and sink into a comatose state, in which they died, where the vesicle was apparently emptied twice daily. Now I believe that the life of those patients could have been prolonged had this precaution been taken, for *I* think that they were poisoned by the decomposition of the urine left behind at each operation.

Another cause, and difficult to relieve, is a thrombus or coagulum in the canal, from hemorrhage of the vesicle, kidneys, or from the urethra itself, called sometimes urethro-

thromboids. If these coagula be in the neighborhood of the prostate, it is often very difficult to determine, especially if we find this gland, by rectal examination, enlarged simultaneously with the thrombus. Here an inexperienced party might "prod" for an indefinite time without reporting "progress." In such a case, where the obstruction is not understood, it is better, having tried the instrument, cautiously and mildly, as before directed, to withdraw it, when there will generally be found evidence of clot, having the appearance of extravasated blood, somewhat broken down by the lapse of time since its outpouring, differing in this respect from any bleeding caused by the recent introduction of the catheter. This condition can only be overcome by a patient syringing with water as warm as can be borne, aided with an exhausting syringe and a large eyeleted catheter. If the clot be of slight extent we can usually succeed in this way. These directions are made with reference to such a case. If the clot is very extensive, and the demand for immediate evacuation urgent, the knife or stylet, and canula, one or the other, must be used.

And it should be remembered that coagula in the urethra is always a dangerous condition, indicating other forms of disease behind the immediate trouble. Neither have we any means of knowing at the time from whence the hemorrhage is. As before remarked, it may be from the kidneys, bladder, or urethra, and after having relieved the present difficulty, other treatment and conditions involved in these cases will be necessary, which we cannot here discuss.

I remarked that tumors were sometimes a cause of retention, as also abscesses. These may be either within or without the urethra; if the latter, relief is had by the use of the knife, which must be resorted to if the canal is much impinged upon and distorted. Perhaps it is the better practice to evacuate all pelvic tumors, even if they be not in the way of the introduction of the instrument to the bladder, if they be in a state of suppuration, or even inflammation, leading to that condition.

Tumors that arise within the canal, which they may do at any point, can sometimes be overcome, if not too indurated, without much difficulty. Size, of course, enters into the obstruction, as well as induration. These often become a complete barrier to the egress of any instrument in the form of catheters.

Various medicated unguents and lubricators are recommended for this, with a view, perhaps, of aiding, in addition to the introduction of the catheter, suppuration of the tumors. Nitrate of silver has been tried. I fail to see any advantage in this. I would give the preference to a well-directed and forcible distension of the canal, with a large bougie, well tapered at the point. This would, in all the yielding portion of the canal, push the tumors aside. Then follow with a moderately large catheter, after which I would divide the tumors with the urethrotome, from time to time, until suppuration is induced, aided by stimulating unguents. Then they become subjects for other forms of treatment, not necessary to enter into.

I will say, however, before leaving this part of the subject, that should the urethral tumor be situated near the prostatic portion of the canal, in which we should likely have an inflammatory condition of this gland, I should not be inclined to adopt the plan just recommended, even in those in which we would not suspect chronic enlargement, for I believe that even temporary inflammation in or near this gland may result in hypertrophy. Hence we must avoid all irritation, allowing the exigency of the case to modify our course of treatment. Here the urethrotome is required. Scarifications, topical bleeding, warm fomentations, and anodynes, should be used as adjuncts, and thoroughly persisted in until a free discharge from the parts is had, to insure success.

There are other causes for this form of ischuria, less grave, however, such as inspissated mucus, prolapsus uteri and flexions of this organ, a distended and impacted rectum, hemorrhoidal tumors, calculi, etc. The first of these can be overcome by the catheter, in the same manner as directed for coagula, and perhaps with greater ease.

Where the uterus, by its flexion, etc., is the cause, manipulations, with the use of the uterine sound and catheter, will succeed with little difficulty. An impacted or swollen rectum might, unquestionably, prevent the flow of urine, or the passage of the catheter or bougie, as also the introduction of the index-finger within the bowel. There we must use chloroform, and remove the impediment, prior to any further attempt at catheterization. The last named cause I shall not for the present discuss.

COTTON AS A SURGICAL DRESSING.

By F. K. Bailey, M. D.,
Knoxville, Tenn.

We see an occasional reference of late to cotton as a surgical appliance. As an application to burns and scalds it has been employed for many years, both by medical men and in the domestic practice of families.

In the *American Journal of Medical Sciences*, for October, 1871, is an article by M. Guerin, upon the employment of cotton in dressing wounds. He applies a thick covering of cotton, so as to prevent, by filtration, the access to the morbid surface of the dust and germs floating in the atmosphere. This he does in admiration of the dust and germ theory of disease, as advanced by Pasteur and Tyndall.

His mode is to wrap around a stump, for example, successive layers of cotton. He uses it very freely. In amputations of the thigh he winds the cotton to the hips, and around the waist, in order to guard the approaches to the wound from above. He does not use carbolic acid in any way whatever. In the *Reporter*, for June 1, 1872, is a reference to observations by William Warren Greene, M. D., of the Medical School of Maine.

There are other allusions to the same substance, but space will not permit further quotations.

I desire to present the result of personal observation in the use of cotton, especially as an application to burnt surfaces.

Since the extensive use of steam as a motive power on water and land, explosions, under varying circumstances, have given us frequent opportunities to test our skill in dressing burns and scalds.

In October and November, 1854, there were a series of casualties upon the Chicago and Rock Island Railroad, near Joliet, in which many were scalded by the escape of steam from the locomotive, upon the engineers and firemen, as well as, in one instance, into a car filled with passengers. It was in the care of those injured persons, in connection with other medical men, that my first and only extensive observations were made in the use of cotton as a dressing.

At that time, as remarked above, the use of cotton in dressing burns was not new, but it was the manner of application, and its continuous use till healing was accomplished, that was a prominent feature.

I will state that on one occasion there were more than thirty severely scalded in one car. The injuries were so severe that the skin was blistered at every part uncovered by clothing, and in some cases the covered parts were scalded.

The first application made was cotton and linseed or olive oil. This dressing was left on as long as possible before being removed, and from necessity it remained, in some cases, longer than was thought desirable, but it was impossible to attend to so many. All that could be done was to remove the first dressing as soon as the case could be reached, and merely reapply cotton and oil. Some sank away during the first few hours, and out of thirty-two, sixteen eventually died.

The dressings were removed and reapplied each day, as often as the exigencies of each case demanded, but cotton alone was used, except upon the face, where old, soft linen was substituted. In nearly every case the face was extensively burned, and it was necessary to so cut and shape the pieces of cloth as to make a mask.

There was one point observed in the redressing of the suppurating surfaces in these cases, which was to let remain any and all fibres of the cotton which had become adherent, removing only such as were loose or saturated with fresh pus.

By observing this, there soon formed a crust or scab, made up of cotton and the purulent secretion, which served as a protection to the suppurating surface. Should any pus subsequently form under this crust, it was evacuated by making an opening in the centre, or gently raising one edge of the crust, if it chanced to be at all loose. In cases of sloughing or deep ulceration, it was necessary to remove the whole dressing, as the pus was so abundant as to keep it loose. Again, there was little or no water used in dressing these cases, the surplus pus being merely wiped off, or simply absorbed by a soft cloth laid on, without any wiping.

Stimulants, tonics, and plenty of animal food were given in order to support the strength.

In regard to any specific influence which cotton may exert in preventing the access of dust or any germs which may be floating in the air, no discussion will be undertaken. Of the practical benefits from its use no one can entertain a doubt who has tried it.

If I recollect rightly, there is a tradition-

ary impression in some parts of our country that cotton is injurious to a sore, or "poison," to quote the language. It is but a few years since lint was ignored by many, unless scraped from *linen;* cotton was avoided as poisonous, or at least, not as good as linen. I think this notion may have obtained from the fact that our national ideas of surgery originally came from Europe, at a period when linen was almost the only textile material used, and that lint was made from that alone.

From all my own observation to the present time, I am more and more satisfied that cotton is unexcelled as a dressing for suppurating surfaces, however caused. Since the introduction of carbolic acid into use as a surgical appliance, the use of cotton has been enhanced.

A few weeks since I was called to see a child less than two years old, who had pulled a cup of hot coffee upon its arm. The cuticle was removed the whole distance from the middle of the arm to the wrist; besides, there were blistered spots upon the neck and shoulder. I at once wrapped the whole member in cotton wet with a solution of carbolic acid. The first removal of dressings was in forty-eight hours, when the whole burnt surface was denuded of cuticle, but not in the least inflamed. In less than ten days the whole was healed, and the child never cried from the injury after the first dressing had been applied fifteen minutes. After the second dressing, no attention at all was required but to keep the arm clean. If there is anything real in the dust and germ theory, certainly there is an efficient auxiliary to cotton in the external use of carbolic acid. I am confirmed more and more every day, not only from personal observation, but the published reports of others, in the valuable properties it possesses.

I will here remark, that the idea of forming an eschar, by means of cotton, upon the surface of a suppurating sore, was first suggested to my mind by Dr. A. L. McArthur, who, in 1854, was prominently engaged in the care of those who were scalded.

Any one in dressing extensive burns from steam will find that as each succeeding dressing of cotton is removed, more or less fibres will become adherent through the drying of pus. Let all such remain, and reapply the cotton to the raw surface. Soon it will be found that the whole surface will be thus covered. This will be particularly noticed if carbolic acid is used, as that serves to diminish the amount of pus secreted, or to use a common expression, "dry up a sore." Wadding split, and the inside surface applied to the sore, is best, as the glazing serves to preserve its continuity.

AN INTERESTING CASE IN OBSTETRICS.

By George M. Romig, M. D.,
Of Allentown, Pa.

I was called to attend Mrs. R., in labor with her first child. Upon examination, found that my finger was opposed in its progress through the vagina, about two and a half inches from the entrance, by a dense membranous partition. All search for some possible passage proved futile. The gravid uterus could, however, be felt above, and the fœtal head was forced down into the cavity of the pelvis during a pain. It being the early stage of labor, the patient was left, with the request of further notice if the pains should increase. Again summoned in the evening, the condition of things about the same, and I was now convinced that the case was one of unruptured hymen. On a third visit, labor had not made much progress. After frequent and careful examinations, the edges of the os were discovered and felt through the membrane, dilated to about the size of a silver quarter dollar. As the pains increased, free dilatation ensued, the head advancing through it, and now pressed slightly on the membrane. Still believing there must be some slight opening somewhere, I continued searching, and of a sudden was aware that the convexity of my finger nail was in a slight depression.

I forgot to mention that, upon closely questioning the patient in reference to menstruation, and the husband in reference to coition, the reply was that she had always menstruated regularly, and that no difficulty had been experienced. As labor advanced, the head, descending more and more, began to distend the membrane, and hoping that it might be ruptured with the finger nail, I commenced scraping briskly, taking as the point of operation the depression above mentioned. After persistent and forcible effort it yielded, and gradually an opening was effected large enough to admit the finger. Having got so far, the operation was completed by tearing it freely in every

direction; but I found that even after this, the opening was no larger than the os when about two-thirds dilated, and that its edges presented a firm, resisting band; however, that caused no more anxiety, knowing that when the head became firmly engaged in it, it would soon yield. This followed, but very slowly. The second stage proved very tedious, and eventually labor was terminated successfully with the forceps.

Medical Societies.

REPORT ON MEDICAL CHEMISTRY,

By J. B. Hough, M. D.,

Professor of Physics and Chemistry in Miami Valley Institute.

Read before the Ohio State Medical Society, June 12th, 1872.

[*Reported by* J. W. Haddock, M. D.]

"Since we can become conscious of a phenomenon only by some change wrought in us, every phenomenon necessarily implies redistribution of force—change in the arrangements of matter and motion."—Herbert Spencer, "*Classification of Sciences.*"

At a meeting of the *Ohio State Medical Society*, held in the city of Columbus, June 8, 9, and 10, 1869, the following action was taken:—

"*Resolved*, That a committee of — be appointed, for the purpose of reporting upon the propriety of recognizing *Medical Chemistry* as an essential element of a medical education."

The committee to whom was referred the above resolution begs leave to report as follows:—

A short time previous to the meeting referred to, the writer had called attention,* in an article which was copied into leading Eastern journals, to the importance of reform in this direction.

As the article was but a short paragraph, the liberty is taken of embodying the same in this report:—

"While every medical school recognizes the importance of, and provides the apparatus and reagents necessary for the demonstration of the facts and principles of Elementary Chemistry, very few of our institutions make any provision enabling or requiring our students to become *practically* educated even in the merest elements of the science; and still less in those departments most essentially related to the science of Medicine and Surgery.

"Very few schools recognize such a department as *Medical Chemistry*, either theoretical or practical, and yet no department will yield a larger dividend to either the college or its alumni.

"So thoroughly convinced of this fact are the schools and students that have taken a pioneer step in this direction, that they would as soon, nay rather, dispense with almost any other chair. Certain preparatory educational qualifications are required for admission into all our medical colleges, not because they are considered a *part* of a medical education, but because they are an indispensable *means* to a certain *end*. Would it not be every whit as rational for us to establish in every medical college a Professor of Languages, and then stop there, requiring no oral or written drills, examinations, or theses, as to have a Professor of *Elementary Chemistry*, and go no further than this, requiring of our graduates nothing more nor less than the same identical chemical education that we would recommend to our dyers, distillers, and manufacturers? If the *elementary* or the *applied* science must one or the other be omitted in a medical collegiate course, had it not better be the former, letting it come in as a preparatory qualification, so that the time of the course can be devoted to its *practical application* in medicine? But there is no need of dispensing with *either*. A certain moderate proficiency in *practical* chemistry, both *general* and *medical*, can and should be one of the conditions of graduation. It is not incompatible with the circumstances of any school or student otherwise successful. While medical colleges are generally moving in the way of reform, it is ardently hoped that this subject, among others, will not be overlooked.

"The physician who has even a moderate proficiency in this line is in possession of advantages second to no other item of qualifications. To him formulæ and processes are matters of convenience, not of necessity. He is independent, if he choose to be so, of careless, incompetent, or dishonest apothecaries. Phenomena that reveal nothing to others, or give rise to nothing but trouble or perplexity, may be to him the finger-post that shall point him not only to the means of saving lives that might otherwise be lost, but also to that goal of every noble-minded physician's ambition, a high degree of success, and well-merited eminence. Practical pharmacists well know that their *reliable* preparations find their way into the hands of those who know enough of chemical tests to protect their own interests. A *very large* proportion of the drugs prescribed and dispensed are only mere compromises of what they should be, sufficient only to gratify the wishes, but not to supply the wants of those who use them.

"Whenever those who use or prescribe medicines under their own personal responsibility are sufficiently posted in practical tests to protect themselves from imposition, then, and not until then, will reliable drugs be the rule instead of the exception. The amount of actual chemical knowledge obtained and retained by the mass of medical students who "graduate" without any

* Cincinnati *Lancet and Observer*, August, 1868.

course of practical drill amounts necessarily to just about nothing at all.

"Many retain a vague remembrance of elements, equivalents, and even some of the general laws of affinity; but what is their knowledge to them more than a mass of verbiage?

"Though they may have been students of the highest natural capacity, and may have attended the finest and ablest of lectures, still they find it about like learning to swim without going near the water.

"No wonder the value of chemical science is underrated even by the medical profession. It is one of those things that can be appreciated only as they are understood."

There seems to be, however, a general willingness to admit that chemical processes are competent to grapple with abstruse and delicate problems, and to originate wonderful and beautiful experiments; but when it is proposed to direct by its aid the everyday business of a medical practice, most physicians are exceedingly skeptical! All are willing to admit the ability of the analyst to detect the thousandth part of a fatal dose of almost any poison; none dispute that fermentation is impossible in presence of the merest trace of certain chemical agents; all agree that heat or acids will coagulate albumen; that tannin precipitates gelatin; that pepsin dissolves vegetable and animal tissues; that air or oxygen hastens, while caustic alkalies retard or prevent the coagulation of blood; and still they doubt the value of chemical evidence in the investigation of physiological and pathological processes! Every process in nature, terrestrial and celestial, vital as well as non-vital, physiological, pathological, or therapeutic, is merely a change in the arrangement of matter and force. It has been customary to classify all motions as mechanical and chemical. The terms molar and molecular have also been used; and though it was formerly thought that the line of demarcation was distinct, and easily drawn, it is now known that the phenomena and laws of one class of motions are in the main applicable to the other, and a middle ground exists, for which the terms Molecular Physics, Molecular Mechanics, Chemical Physics, etc., have been variously proposed. In fact, the different departments of physical science are so intimately related that the distinctive names applied to them are often conveniences rather than necessary terms, representing natural divisions; and when we use the term *Medical Chemistry* we wish to be understood as including under that term all that range of topics necessary to form a complete, connected system.

It may be claimed by some that there is little or no *demand* for any such complete system; but whatever truth there may be in such claim, it cannot be thought that we have no *need* of it. Had steamboats, railroads, and telegraphs, been withheld until a demand called them into existence, we had been without them to-day.

Utility creates its own demand. An immense mass of useful knowledge relating mutually to Physics, Chemistry, and Medicine, is now "lying about loose." Why not embody it under some individual form? No matter, perhaps, whether we call it Medical Philosophy or Medical Chemistry. The inquiry comes from within and without the profession, "Have we a Medical Philosophy?" Assuredly, if we have not, it is time we had! *All truths* harmonize. Every true science necessarily harmonizes with every other true science. If any contradiction occurs between any two, one or the other must necessarily be false; for one truth cannot contradict any other truth. Now there are certain immense strides that have been made in the physical sciences in the last quarter of a century, that have scarcely begun to react upon the medical profession.

Foremost among these is one that enters as a common factor in all the phenomena of nature,

"The Persistence of Force."

This cardinal truth, known also as

"The Interaction of Natural Forces,"

"Conservation of Energy."

"Correlation of Force," etc.,

Is admitted on all sides to have an application as wide as the range of human thought. A truth "Deeper than demonstration—deeper even than definite cognition—deep as the very nature of mind." "Its authority transcends all other whatever; for not only is it given in the constitution of our own consciousness, but it is impossible to imagine a consciousness so constituted as not to give it." "The sole truth which transcends experience by underlying it."*

It would be out of place in this paper to elucidate the great doctrine referred to, but we may safely say that upon this field is to be fought the final battle of Truth against Error, and the side on which the ranks of Æsculapius stand or fall the thickest, will depend upon the course the profession takes during the next few years. The *spirit* of progress is rife enough, but it is too much disposed to run in speculative channels.

It is the spirit that nurtures "pathies" rather than pathology. It is too prone to value fictions rather than facts. While the physical sciences generally are taking a bold and rapid march onward in this line of truth, shall medical science loiter by the wayside, leaving its deserters here and there to swell the ranks of charlatans and quacks, those ghouls that feed on putrifying ignorance? We believe that the greatest influence that we can ever bring to bear toward wiping out the polluting stain of quackery within and without the profession, is a thorough revision of medical teaching and text-books; bringing both fully abreast of the times, and especially in the line to which our subject refers. The tenacity with which many influential writers and teachers cling to old books and obsolete ideas is astonishing. It is high time that those in high places should

* Herbert Spencer.

make a clean sweep of all the rubbish, and place Medicine in the front rank of those sciences whose Alma Mater she has been. Assuredly if we do not do it, quackery, with its pseudo science, will gull the public into the belief that it is doing what we are neglecting. Let it not be understood that we are making a sweeping complaint against medical teaching.

Most of it is admirable. Nor that we disparage the mass of truth, the product of centuries of labor and observation. Our objections are taken to the faults of omission, most of which would be covered by a comprehensive system of Medical Chemistry. The student is taught that a given bone has a given articulation, and is moved in a given direction by a given set of muscles; but is he required to learn that muscular contraction is the correlated expression of chemical change? Perhaps he is befogged by a superstitious faith in the dogma of a "vital force." If so, he must submit to be led by an unseen fatality which he imagines to be independent of matter and physical laws! If the chemist has shown that there is no such thing as "vital force," or at least, no reasonable evidence of its existence, why continue to nourish it as a pet fiction of the brain? If it have no foundation in physical nature, the ravings of delirium, which also are creatures of the brain, have an equal claim on our credulity. But has the chemist done all this? Has he not, by directing the known physical force, already built up hundreds of those organic compounds that were, and still are, by many, taught to be the special products of a "vital force"? "Of the three great classes of organic compounds, the oleaginous, the saccharine, and the albuminous, the first is completely under his power, and the second partially so." How long it will be before the other half is accomplished we know not, but dare not venture the dictum that the same intellects that sought out thus much of the hidden ways of nature are powerless to go further. Instead of concealing our ignorance under a very doubtful hypothesis by explaining the relations of diseases and remedies to the nervous system and the fictitious energy invented for that purpose, let us study the relations of food and medicine to the animal forces, and the relations of these to other known varieties of energy. But we must be cautious about believing every dictum, whether in harmony with experience or not. The *great* thinkers sometimes err. The same man that taught that nitrogenous food was the source of muscular power, and non-nitrogenous food the fuel that generates animal heat, said also, "Show me the man who never errs and I will show you the man who accomplishes nothing." When Tick and his associates questioned nature on this point, she answered that the work done is *three times as much* as the oxidation of the nitrogenous tissues could possibly supply, and that muscular force as well as heat is mainly dependent upon the carbon consumed as fuel: So that vegetable and animal tissues act only as machines for converting the forces of inorganic into those of organic nature.

Progress in every department of science depends upon the accumulation of *facts;* in the storing up of these we are building up experience, but it is only by the elaboration of these into *truths* that we establish those general principles which alone constitute the basis of all true science. It is no misfortune then that Medicine is to a great extent empirical. But we must not forget that this element does not yet constitute true science. It is a mass of raw material waiting to be wrought into science. Science is the *relation* not the *summation* of experience.

It is not thought necessary to give here even a brief outline of what Medical Chemistry should include, or what it may be expected to accomplish. Its claims are set up on general principles.

However, there is one line of research that might, for the present at least, be profitably included. Microscopy in its application to Medicine is largely dependent upon chemical tests, for which and other reasons a practical knowledge of the construction and use of the microscope might justly be communicated through this channel. Here and there a school makes some provision for microscopical manipulation, and a very few for some of the simpler medico-chemical tests. Why not unite the two, and make both more thorough and efficient? There are few chemists who are not practical microscopists as well. Some such reform must and will be brought about. The public, even the uneducated public, demands it. The strongest hold that charlatans and quacks can secure by their free and universal system of advertising is the credit they get of being the progressive and scientific prodigies they pretend to be. A neighbor of mine was seduced by one of those incendiary circulars into visiting one of the "great" city celebrities, the "CELEBRATED Dr. SOANDSO." He found the waiting room "Crowded with scores of patients waiting to be made whole!" "And," said he, "when I was ushered alone into the august presence of his doctor-ship, I was perfectly convinced that I had found a great man; for there, over a furnace, was a huge boiler, with pipes coming out of both sides and both ends, and crossing each other, and doubling and twisting about over and under, and in and out, and up and down, with stop-cocks and jim-cranks, and elevators and perambulators running into refrigerators and duplickets, and making the allfiredest sizzlin and fizzlin you ever heard of, and the infernal machine distilled thirty-five dollars out of me before I could take time to think." And thus it is. Science is in demand; and if we do not furnish a genuine article, the counterfeit will be supplied *at our expense.*

We feel like begging pardon for calling attention to a matter so obvious that its bare mention is almost a reproach.

Some, however, may insist that we might

well be satisfied with what is being done in this direction; *but such opinions do us no credit.*

In conclusion, then, two modifications in the course of medical education are insisted upon:—

First. Let Elementary Chemistry be required as a preparatory or under-graduate qualification; and,

Second. Make a respectable knowledge of Practical Chemistry, both general and medical, one of the conditions of graduation.

EDITORIAL DEPARTMENT.

PERISCOPE.

Rupture of the Urinary Bladder.

Dr. EDWIN BENTLEY, Assistant Surgeon U. S. A., writes to the *Pacific Medical and Surgical Journal*:—

We are accustomed to associate rupture of the bladder with some mechanical injury to the bones of the pelvis, or some breach of continuity in the soft parts in immediate proximity; and while this is true in the majority of cases, rupture does occur without any wound visible to external inspection or most careful dissection. The bladder, when distended to its maximum, is liable to rupture from blows, kicks, rolling out of bed, running against a post, falling down, or by muscular action alone, without producing any external marks of violence whatever. This latter cause would be a sufficient reason to induce the prudent accoucheur to secure the evacuation of this viscus, not only in cases of instrumental labor, but in all cases, lest the powerful contractions of the abdominal muscles, in the expulsory effort, should result in this very grave accident.

At the *sectio cadaveris* the following features were noted: A medium sized man of mature life; head of a remarkably quadrangular figure; a yellowish tinge over the surface; rigor mortis well formed; pupils widely dilated, and the abdomen distended. The brain passively congested, and the bowels engorged with blood. The lungs were healthy and collapsed; no pleuritic adhesions. The heart was flaccid; the cavities were empty, and valves and vessels normal. The abdomen contained nearly two gallons of an amber-colored fluid, possessing the odor of urine. The liver firm, red, and granular, with rounded edges; spleen above the average size; kidneys congested; the stomach and intestines were healthy, and not a trace of blood or inflammation could be detected along the whole extent of the peritoneal folds. The bladder was firmly contracted, and in its upper and anterior wall was an opening large enough to receive the joint of the index finger, running nearly transversely to the organ, with slight extravasation of blood around the edges of the wound; and a full-sized *catheter* was readily introduced, not alone in the bladder, but through the orifice at the apex into the cavity of the peritoneum.

During the examination the following brief history was adduced: The patient had never suffered from disease of the urinary organs, but with his bladder fully distended he fell down a flight of stairs, and soon afterwards was seized with violent pain in the hypogastric region, urgent tenesmus, and a pressing desire to micturate. A physician was called, and a catheter introduced, when a little blood and urine followed.

The following day he was admitted to the City and County Hospital, when the attending surgeon introduced a catheter without difficulty, and evacuated a quantity of urine. This was repeated for five consecutive days. On the third and fourth days after his admission he urinated voluntarily; yet the symptoms continued unabated until the sixth day, when he suddenly expired. In the absence of the usual attendant of this severe lesion, viz., peritonitis, the indications would lead to uremic poisoning as the immediate cause of death. When the laceration admits of urinary infiltration, the termination is usually rapid, although Erichsen refers to a case which continued ten days, and to three recoveries in fifty cases. In rupture from external violence, death is said to occur in from three to six days. Ruptures may arise from idiopathic causes, as paralysis of the bladder, enlargement of the prostate, from stricture of the urethra, and in the fœtus from its being congenitally impervious. They have been divided into oblique, transverse, and vertical, and are usually found behind the urethra, in the posterior wall of the bladder. The strong recti muscles of the anterior wall of the abdomen are arranged with their wonderful transverse striæ, which give them increased power of resistance, as well as multiplied strength in protecting this viscus from injury, except in the inebriate, when the fibres become relaxed from the anæsthetic influence of intoxication, and they cease at once to be the guardians of the parts, and to exercise their natural expansive power. And in this way the intemperate, who are constantly exposed to falls, blows, and kicks, escape an accident that, were it not for the happy sympathy which so fre-

quently exists in the relaxation of the sphincters, I suspect would otherwise be much more frequent. In the recorded cases where the bladder has been torn without any evidence of external violence, the subjects have been intoxicated, and fallen down stairs, as in the present instance. The symptoms have been intense pain in the abdomen, urgent and usually ineffectual desire to pass water, followed by collapse, or if reaction occur, peritonitis. Not unfrequently the urine has been drawn by passing the catheter directly through the rent into the peritoneal cavity. Occasionally the patient has voided urine himself, and it is not uncommon for a little urine to escape in the attempt at defecation which the urgent and continued tenesmus produces. The prognosis is decidedly unfavorable. The treatment, after reaction and recovery from the shock, applicable to peritonitis, is usually indicated. Various surgical devices have been proposed, as the lateral operation for stone; and Mr. Solly, in the "Transactions of the Pathological Society," has recommended the puncture of the cul de sac of the peritoneum, as advised by Mr. Harrison, of Dublin.

Drunkenness and Syphilis.

Dr. C. G. WHEELHOUSE, in the *British Medical Journal*, says:—

And now, how do we, as a profession, stand with respect to these two scourges? Can we honestly lay claim to having done our best towards either prevention or cure in either of these matters? The mind of the whole nation is at last fairly roused on both subjects; the public is discussing them freely; our statesmen are canvassing them eagerly; our legislators are actively engaged in endeavoring, as far as possible, to bring the machinery of the law to bear upon both; for the feeling is abroad—widely spread through the length and breadth of the land—that to these two evils may be attributed a large share, at all events, of our diseases, of our accidents, and of the deterioration of our national health and vigor.

To us, as a profession, all parties appeal both for information and for help; and in the former case, though I regret to have to say it, yet truth compels me to admit it, we are looked to not only as helpers and advisers, but, in many cases, even as primary offenders. Nothing, I take it, can be more true than the assertion that men cannot be made sober by Act of Parliament; but is it not equally true that both men and women may be made drunken, and that only too easily, by misdirected and unwise advice? In how many of the cases of the intemperate is the evil primarily laid to the charge of the doctor? "I should never have taken to the use of wine or spirits if I had not been advised, in the first instance, by my medical man," is the excuse that has many and many a time been made to me when I have felt it my duty to speak plainly to unhappy patients on this subject; and though I know that very often this is only an excuse, yet I cannot hide from myself the fact that, in many cases, there is a grain of truth in the assertion. Most of us have been in times past, and some are still, too much in the habit both of recklessly prescribing stimulants and of fostering the idea that they are an essential part of our ailment. It is against this habit that I would make an earnest appeal. That they are often of the greatest value, and to be replaced by no other remedies, I am quite ready to admit; that without their aid many a case now saved would sink hopelessly away, we can none of us deny. Ammonia, ether, and such like substitutes, are very well sometimes, and sometimes are even of greater value than either wine or brandy; but to say that they can always take the place of these latter, is a doctrine against which all experience is emphatic, and which, I am sure, will come readily home to every one of us.

Gentlemen, I am no teetotaler, and I do not desire to speak from any teetotal platform; but I am anxious, if I can do so without impropriety, both to speak a word of wholesome warning, and also to save a class of remedies, invaluable when rightly used, from the consequences of careless administration and abuse. Let us take the subject to heart, I entreat you; and especially in the cases of the young and of females, let the prescription of alcohol in any form be a matter of as serious consideration as that of opium or of strychnia, or of any other deadly poison; and when the necessity for their use has passed away, let their discontinuance be as carefully prescribed. The habit of indulgence, when once established, cannot easily be checked; and I would fain wipe away from the hands of the profession the stain of its careless initiation. If, after this course has been adopted, a patient willfully drifts into their abuse, the fault will clearly be his own, not ours.

And lastly, gentlemen, of syphilis. Of how many frightful maladies would the world be rid could we but put our heel on this hydra-headed monster and stamp it out of existence? How many hundreds—aye, thousands—of sufferers would learn to bless our endeavors if they only knew to what source rightly to attribute the origination of their ailments? How many of these ailments baffle our utmost skill? How many existences are rendered miserable from the cradle to the grave? and yet how possible is it for us to stretch out a helping hand in this direction? By some far-seeing philanthropists the Contagious Diseases Acts were first promulgated; and though a cry of horror has been raised concerning them throughout the land, it is raised simply in ignorance.

I know that I am speaking to an audience of gentlemen whose opinions may differ somewhat upon this much-vexed question; but I feel that the subject is one of such vital importance that I should be morally guilty if I did not speak out plainly upon it. The cry of horror and of shame that has swelled

up throughout the land with respect to these Acts has been a source of infinite satisfaction to me, for it has shown me that the heart of the nation is right in the matters of morality and modesty, and that in this old England of ours the purity of our women is still, as it has ever been, one of the great bulwarks of the nation; but it is a cry raised in ignorance, though fostered from most worthy motives. God forbid that I should seek to further any step that should tend to lessen the purity of pure English women; but you and I know only too well how deeply changed is the nature of those to whom, and to whom alone, these Acts can apply, and how infinitely below all ordinary standards they have fallen. Surely she who can make prostitution her occupation is beyond the pale of everything but reclamation; and for the sake of humanity, both living and as yet unborn, we are, in my opinion, bound by an inflexible chain of duty to endeavor by every means in our power to check the spread of the illimitable evil which prostitution is capable of inflicting.

They who hold the opinion that the evils which mankind bring upon themselves by their sin should be justly borne by themselves as their punishment, are undoubtedly right; but they have no knowledge, they can have no knowledge, of the dire ramifications of the evil it is sought to check. They forget that the effects of the sins of the father are to be carried by even the third and fourth generations of the children; and it is on behalf of these, the purely innocent, the yet unborn sufferers, that we are pledged to fight. How common to every one of us is the picture of little children brought into the world to pass through a long and weary martyrdom of miserable life; with eyes never destined to behold the glory of God's light; brains never destined to raise them above the level of the brutes; alimentary canals unable to digest the simplest food; bones too rotten ever even to assume the ordinary proportions of health; and bodies defaced, deformed, and crippled, till, instead of bearing the image of the Creator, they become almost too hideous even for the creature to behold.

It is in behalf of such as these that I venture to ask you to turn your thoughts in the direction of syphilis to-day; and I feel sure that, however widely we may differ in our opinions as to the advisability of the remedy applied, we should all be only too thankful if we could venture to hope that, in the end, the disease might perchance be eradicated.

Glaucoma and Iridectomy.

Dr. CURTIS says, in the *Pacific Medical and Surgical Journal*:—

The diagnosis of glaucoma is not difficult, yet it may be possible for one but little acquainted with the disease to mistake it, in its various forms and stages, for some one of the following troubles: Glaucoma simplex, with narrowing of the visual field, might at first thought be taken for amaurosis; but the hardness of the globe, the halo about a candle, and above all the ophthalmoscopic appearances, would declare its nature. An acute attack might be mistaken for the commencement of purulent conjunctivitis; but the presence of severe, bearable pain, the tension of the ball, the dimness of vision while the cornea remains clear, and the absence of all purulent secretion, sufficiently indicate its character. It might also be thought facial neuralgia; or even rheumatism, when the pain extends over the whole side of the head and is severe at the occiput; when accompanied by nausea and vomiting, a bilious attack might be surmised; but underlying these prominent symptoms the careful physician will not fail to detect signs which show the eye to be the starting point of all the disturbance. If the ciliary vessels are much injected, it might be thought iritis; but the varicose condition of the episcleral veins, the shallowness of the anterior chamber, and the dilatation of the pupil, would put at rest any doubt. Turbidity of the vitreous, together with the natural deep tint of the lens peculiar to age, frequently give the appearance of cataract; and the cataract which actually forms in the last stages of glaucoma might be considered the primary disease; but the previous history of the case would quickly disabuse one's mind of such an idea. From paralysis of the accommodation, accompanied—as it usually is—by dilatation of the pupil, glaucoma may be told by the absence of all its other symptoms, by the normal appearance of the fundus under the ophthalmoscope in cases of paresis, and by the action of calabar bean, which contracts the pupil and improves vision in the latter disease.

The prognosis for glaucoma in all its forms is the same; if left to itself, or if only palliative measures are used, it sooner or later invariably leads to total blindness. Hitherto all efforts to cure glaucoma by the administration of drugs or by operative interference have failed, with the single exception of an iridectomy performed as Von Graefe directed. It is true that a patient may recover from an attack of the disease, and have his sight for the time being almost wholly restored, by the use of appropriate medicines, or by some simple operation, such as repeated paracentesis of the anterior chamber, a peripheral incision of the cornea, or a division of the ciliary muscle; and the same result might possibly occur if the attack be suffered without treatment, but it is sure to be followed by other attacks which lead the patient steadily forward to the goal of perpetual darkness. Fortunately, however, this is an unnecessary terminus; a properly performed iridectomy, done at the proper time, will surely restore the patient's sight and prevent other attacks. But the simple cutting out of a portion of the iris, as is usually done in the operation for an artificial pupil, is not sufficient; the lance-shaped knife should be entered in the border of the sclerotic, just anterior to the junction of the iris and ciliary

body, instead of through the corneal tissue; the wound should be wide, so that at least one-sixth of the iris may be taken out, which should be removed close up to its ciliary attachment. If the anterior chamber is shallow, great care should be taken that the point of the knife does not injure the capsule of the lens, thus causing traumatic cataract; and it should be very slowly removed from the eye, so that the aqueous may escape gradually, thus lessening the danger of intraocular hemorrhage, which sometimes occurs from the tension being removed too suddenly.

After the operation, I think the best dressing is that recommended by Prof. Agnew;* a strip of isinglass plaster is put over the lids to keep them closed, a parallelogram of soft cotton or linen of a size sufficient to extend beyond the orbit on either side, and from the level of the nostrils to above the supercilliary ridge, is placed over the eyes, and a double fold of black silk, large enough to cover the cloth with the exception of the narrow strip at the upper edge, is placed over this; a notch is cut in the dressing at the middle of the lower edge, so that it may closely fit about the nose, and the edges are fastened to the face by strips of isinglass plaster. As a rule the dressing need not be removed till the third day, and once a day thereafter will be quite as often as necessary until the eye is free from inflammation; after which a shade should be worn, being gradually left off as the eye gains strength. The advantage of this dressing over the ordinary bandage is, the patient may be more safely exposed to the light, and the eye is kept cool and without pressure.

It is often asked how iridectomy cures glaucoma? That it does so by permanently reducing the intraocular tension is certain, but the *modus operandi* by which this reduction is kept up is unknown; many theories have been set forth to account for it, but to each one as many objections can be raised; perhaps when the immediate cause of the disease shall have been ascertained it may be found that the beneficial action of the operation results from the removal of that cause. For a time we must be content with the cure.

The only questions in practice are in regard to the time for an operation in order to secure the most good for our patient, and whether the disease has not gone so far that no operative interference would be justifiable. The opinion of ophthalmic surgeons is quite unanimous that the sooner an iridectomy be done the more sight is saved; it is the long-continued pressure on the delicate structures of the retina that does most harm, and it should be our aim to remove it as quickly as possible. It is found that an iridectomy done in the course of a chronic glaucoma or of glaucoma simplex, does not restore the same amount of sight as when done during the acute form. Even when perception of light is entirely gone in the latter class of cases, if no time has been lost in doing the operation, the result is most gratifying.

* Transactions of the American Ophthalmological Society, 1869.

Sickness and Vomiting of Pregnancy.

Dr. DeCamp, in a paper before the Michigan State Medical Society (*Mich. Univ. Journal*), says:—*Arsenic* has never before been suggested in this affection. He found it possessed the power of directly influencing not only the nervous system and alimentary canal, but that it also strongly influenced the uterus and urinary organs.

It has been found effectual in curing menorrhagia and hemmorrhoids, which also goes to show its power over the organs of the pelvic cavity, when in a state of disease as well as in health.

At this time he thought of its decided power to control some forms of gastric trouble, and reasoned, from its power to influence both stomach and uterus, that it would be worthy a trial in the disease in question.

In a case that soon afterward occurred, where all the then popular and even unpopular remedies had failed to give even temporary relief, he ventured to give this remedy, and was greatly satisfied with the success. To this patient, who had an extreme loathing of all remedies with taste or smell, he administered arsenic in one-fiftieth-grain doses, in powder with some sugar, before each meal. After two doses she could go to the table, eat freely, and retain the food with comfort—a thing she had not been able to do for days before; even the smell of food had caused her great nausea and retching.

From the magic influence here produced he was ready to make it the first thing to try in every new case. The result was that in nine-tenths of all the cases a speedy cure or relief was obtained. Of the dose, he said: "I have never used over one-thirtieth-grain doses, and in many cases have found drop doses of Fowler's solution answer equally well, where the patient preferred a solution to a powder or pill."

He had tried oxalate of cerium, and found it to fail in about one-half of all the cases in which he administered it.

In over fifty cases he had not failed of success by the use of either arsenic, calomel, or oxalate of cerium. Experience has taught which particular remedy to give in each case. Where the vomited matter contains much bile, with a brownish or yellowish coating of the tongue, with other evidences of disorder of the liver, our remedy is calomel. Where the patient complains of acidity of the stomach, with distress from eating, then the remedy is cerium.

By far the greater proportion of cases are those that loathe the smell, taste, or even thought of food. Many I have known to go for days without eating to avoid this, where the morning sickness caused no great suffering. Others have a great flow of saliva,

which if swallowed is sure to produce sickness or vomiting.

These are the cases where of all remedies arsenic is the one that has never failed to give almost immediate relief, either temporarily or permanently.

Dislocation of the Index.

The following cases are reported by Dr. BUCKLEY, in the *Pacific Medical and Surgical Journal*:—

The first was in a boy fifteen years old, who slipped on a sidewalk in misty weather, and fell sidewise on his right hand, without suffering any other injury in any part of the body save the dislocation at the joint referred to. My then colleague in hospital, Dr. Crockett, under whose notice the boy first came, drew my attention to the case, after he had used all ordinary means of reduction unsuccessfully, very much to his surprise. Having then put the patient under the influence of chloroform, we both exhausted every suggested and known means of reduction with no better result. Accordingly, we divided the tissues (carefully avoiding all injury to the flexor and extensor tendons) over the joint, turned out the head of the first phalanx, which was thrown forward and directly upward on the palmar region, and with a strong bone forceps removed sufficient of it to readily admit of its being replaced in suitable apposition with the head of the metacarpal bone, as in the ordinary operation for the excision of joints. We washed the wound with a weak solution of chloride of zinc, and placed the finger in a straight splint. The wound healed by primary union; no trouble of any kind marred the progress of the cure, and all the movements of the joint were perfectly unimpaired in three weeks from the date of injury.

The mechanical obstruction to reduction was at the time a source of much speculation for Dr. Crockett and myself, as well as a few other gentlemen who had seen the case, nor, indeed, up to the present have I been at all able to satisfy myself as to its nature. The two theories that immediately suggested themselves to us were—first, that the epiphysis of the phalanx, which at this period of life remains, even if united, somewhat flexible, had been distorted into some entanglement between the flexors; second, that the transverse ligament had slipped in between the heads of both bones. Both these theories were proved to be fallacious by the simple fact that, after complete exposure of the articular surfaces, reduction was as far beyond the reach of our resources as previously, which necessitates our looking elsewhere than at the joint itself for the true seat of difficulty, and adds immensely to the special interest of this form of injury.

Case second came in the first place directly under my own notice. The boy was about 12 years old; the appearance of the hand was exactly similar to the first case; the alleged cause was a blow from a hand-ball on the digital part of the palmar region. Having failed to reduce the dislocation by every device of manipulation within my own resource, I showed the case to Dr. Carter, another colleague, who failed in like manner to reduce it. We both accordingly agreed on an operation similar to that performed in the first case; the boy's mother, who knew sufficient of medicine to be easily deceived, objected, on the ground that if we could not reduce "a little dislocation of this kind without cutting, she would find somebody who could." In a neighboring institution, as we afterwards learned, all efforts failed in a similar manner, and presumably a very large number of private practitioners as well as bone setters *et hoc genus omne*, had also exercised their talents and muscles, with no better effect; for it was fully a week after when the boy was returned to us for operation. This was done exactly as in the former case, and with a like happy result, though by no means so speedily attained.

The Treatment of Mumps.

Dr. RECORD writes to the Cincinnati *Lancet and Observer*:—

This disease is capable of becoming quite a grave one, instead of the trivial thing I was taught to regard it.

It is not a trivial thing to treat cerebral affections, let the cause be what it may. It is a serious affair when a physician has an intelligent, useful, and influential patient lose his reason and become a subject for the asylum, as I feared one of my cases was going to do, and as one did in this county some years back, as I am credibly informed. Neither is it a light thing or "laughing matter" to the *patient* to become sterile or lose his ability to enjoy the pleasures of *coitus*, which has happened in a few instances where the orchitis has terminated in atrophy of the testicles. Then, as the disease may assume formidable proportions, so should the *treatment* be adapted to render it harmless. The disease, as it was formerly treated, ran its course without any interference, and I gave ordinary general treatment a fair trial, and did not see that I did my patients much good until I changed my plan, and tried one not heretofore mentioned.

In the first place, when my advice is sought early, or as soon as soreness, with stiffness of the jaws is felt, I direct patient to go on about his usual vocation as if nothing was wrong, and *not* confine himself to the house and tie up his jaws, or use any embrocations, liniments, or medicines whatever, as heretofore ordered, but just consider himself safer with his mumps uncovered and uncared for than he would be while confined to a warm room, sweating himself with hot flannels, fomentations, or greasy, nasty compounds applied to his neck. There is no surer way to cause metastasis in this disease than to follow the "books." This I *know* from experience, which is worth more than a thousand fine-spun, cut-and-dried theo-

ries. In all cases, where my directions were followed, there was *only simple parotitis with no metastasis!* and per consequence, I lost several fees for my good advice. I shall not attempt to give the theory in a case so plain that I think every intelligent physician will acknowledge it upon a moment's thought; that for a farmer or mechanic, whose life is spent in the open air, to be confined to a hot room, as above said, if he was well when he began his treatment, he would be sick enough in a day or two to call for his physician.

In the next place, when they have followed the "books," and I am called, I proceed to treat *symptoms*, or meet the indications. If there is great pain in the head, a blister is indispensable. Where there is much fever, I meet it with sedative diaphoretics, and use fomentations to the scrotum—*not* that I have much faith in local applications, but because the patient must be pleased, and that will be satisfactory. But I rely now on *turpentine* as *the remedy*. How it acts you know as well as I; but certain it is that in every case, without a *single* exception, where I gave it, the disease was shortened, and my patients were happy and comfortable in from twelve to thirty-six hours. I give all that the patient can bear. The first case that I treated in that way was a young man who had been under treatment by another physician for some days, and he being dismissed, I was called, and found him with fever, and suffering severely with his orchitis. His tongue being heavily coated, brown, dry, etc., I put him on turpentine for its effect on the secretions, and I was surprised at my next visit to find him convalescent; so I tried it again in another case, with like results, and so on until I became satisfied as to its power to relieve the swelled testicles. I now consider it a specific in such cases.

Reviews and Book Notices.

NOTES ON BOOKS.

——A short treatise on the important subject of House Drainage is announced by Macmillan & Co. The full title is "Sewer Gas, and How to keep it out of Houses," and the author, Mr. Osborne Reynolds, Professor of Engineering in Owen's College, Manchester.

——Our "National Text Book," the U. S. Pharmacopœia, is anxiously looked for by all the fraternity. The body who met in Washington in May, 1870, delegated the work to a publishing committee, and it is believed that the work is ready for the printer now, if not some portions already in proof. It doubtless will be a work reflecting credit upon its faithful laborers.

——A "Botanist's Pocket-book" is to be issued in England by Messrs. Bell & Daldy. It is intended as a handy pocket companion for the botanist in the field, and will enable him to identify, on the spot, the plants he may meet with in his researches.

——Of recent French publications we note:—

Bayard (T.), Dr. en médecine.—Traité des maladies de l'estomac. 2e *edition*, avec figures dans le texte. In-8, xx, 595 p. 10 fr.

Brown-Séquard (Dr).—Leçons sur les nerfs vaso-moteurs, sur l'épilepsie et sur les actions réflexes normales et morbides; traduites de l'anglais par le Dr. Béni-Barde. In-8, x, 211 p. 4 fr.

Charcot (J. M.), Dr. en médecine de la Salpêtrière.—Leçons sur les maladies du système nerveux, faites à la Salpêtrière. Recueillies et publiées par Bourneville, ancien interne des hôpitaux de Paris; avec figures dans le texte. 1re *livraison*. Des troubles trophiques consécutifs aux maladies du cerveau et de la moelle épinière. In-8, 100 p.

Jamain (A.), chirurgien des hôpitaux de Paris.—Manuel de petite chirurgie, 5e *edition*, avec 438 fig., intercalées dans le texte. M. Félix Terrier, prosecteur à la Faculté de médecine. In-12, 966 p. 8 fr.

Lépine (Dr R.).—De la pneumonie caséeuse. Thèse présentée au concours pour l'agrégation (section de médecine et de médicine légale); par le docteur R. Lépine. In-8, 144 p. 3 fr.

BOOK NOTICES.

A Manual of Qualitative Analysis. By Robert Galloway, F. C. S., etc. From the fifth rewritten and enlarged London edition. With Illustrations. Philadelphia, Henry C. Lea, 1872. 1 vol., 8vo, cloth, pp. 402.

This edition, as is justly claimed by the author, contains extensive additions, as is required by the rapidly advancing science of chemistry. The general plan of the book remains, however, the same as adopted in earlier editions, the author claiming for it certain advantages over those of Fresenius and other teachers.

Among the additions we may mention Bunsen's flame reactions, with figures of the apparatus he employs, the detection of the poisonous metals and acid-radicals in the presence of organic matter, and generally more complete details for the detection of individual alkaloids. The latter methods will have peculiar interest for the physician, as it is this class of toxical agents now most frequently used in the commission of homicide by poison.

The new notation, now generally received in Great Britain, has been adopted, and in other respects the book is brought up to the current position of chemistry.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 10, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

CHANGE OF AGENT IN NEW YORK.

Mr. Z. P. Hatch being absent a great deal from New York, and the necessity of having an active agent and a convenient office in that city constantly increasing, we have appointed Mr. George Kempton, No. 194 Broadway, as our New York agent. We feel assured that subscribers, advertisers, and others in New York and vicinity, who may find it convenient to transact business through that agency, will find Mr. Kempton attentive, prompt, and correct in his business transactions.

Mr. Hatch retains the agency of the Half-Yearly Compendium.

THE SOURCE OF LIFE.

The progress of what we call natural science has steadily been to confine and limit the sphere of individual life. The manifestations of power in the world around us, which antiquity regarded as signs of volition, we attribute to blind and immutable forces, acting from fixed cause, dateless and passionless.

The sylph no longer sports in the foam of the cataract, nor whispers sweet mysteries in the chattering brook; it is no more the spirits of the air who sing strange melodies in the forest trees; mighty personalities control no more the elements and the actions of nature. Seek where we will in the phenomenal world, conscious life is nowhere found; not only this, every indication and hint of conscious life fades, lessens, as we approach it.

Yet an abiding and indestructible instinct clings about us, urging us to seek and to hope that in the progress of pure science we shall somewhere reach a plane from which we shall catch a glimpse of a life real and possible, outside of the realm of mere natural agencies.

Has physiology as yet found any grounds for such a hope? To her, of all the ancillary sciences of man, we should first look.

The suggestion has been made by an eminent American physiologist, that in the growth of the brain we observe a constant development from birth to death; that its growth in complexity does not cease with the growth of the body; that it is constantly adapting itself to a broader activity.

We know that the properly trained mind by no means reaches its maturity when the body does, but continues to improve and grow for many years after. The analogy is hardly strained, therefore, which compares this to the constant growth of certain organs of the fœtus—those, namely, which are to be used in extra-uterine life—while others, those whose duties terminate with birth, ripen early, and decrease or disappear. The inference is that the mind does not reach its development in this life, but is preparing for another.

Again, is it likely that the most earnest longings and highest capacities of a creature should be totally infructuous and meaningless? No example of this is found in lower natures. Why, therefore, should we insist that man alone forms a startling exception to this law? Yet, granted the annihilation of the individual, how devoid of meaning are his deepest sentiments and aspirations?

The absolute impossibility of conceiving

first causes should at least be a standing bar to a denial of an immaterial power. And that such a power does exist, in other words, that force may be exerted independent of matter, Sir WILLIAM HERSCHEL demonstrated, in reasoning on voluntary motion. For the action of the voluntary muscles can be explained on no conceivable theory other than that of an immaterial will primarily starting the motion.

Such considerations are nowise in favor of the doctrine that life is explicable on chemical grounds, and is but an attribute of matter in certain of its conditions.

RACE AND CLIMATE.

A London paper starts the inquiry whether the summer climate of the Central United States will not ultimately work a deterioration of the race which now inhabits that territory. The text of the article in question is the large mortality which, during several weeks in July, was reported by our large cities.

The effect of prolonged heat on the various human races has long been a subject of study, and the facts concerning it are pretty well known. In spite of striking instances which can in limited number be adduced to the contrary, there is no doubt that a temperature which is not more than agreeable to one race is prostrating to another. In this, much is owing to an acquired and transmitted ability to support extreme heat or cold.

The mortality which is so conspicuous in periods of extreme heat proves on examination to be largely among very young children, and foreigners recently arrived in this country. The intemperate and the aged also suffer conspicuously. English writers are apt to misinterpret the mortality bills of our summers, because their own warm season is the healthiest of the year. As one of the most diligent English medical statisticians stated it, with them, comparing in cartographic form the lines of monthly temperature and mortality, "the waves of heat are waves of life, the waves of cold are waves of death."

That the reverse of this is true in our country, depends largely on the much greater change of our temperature, on the difference of the prevailing diseases, and on the peculiarities of a new country with a large unacclimated population.

The general question whether the white race has deteriorated physically in the United States, cannot yet be answered, because we lack means of comparison. The expectation of life is probably about the same after puberty, or the Life Insurance companies would have discovered it. It is likely that positive physical force, muscular strength, is less here than in England. The athletes who display their brawn on our stages are nearly all foreigners. The inferiority in athletic games of our countrymen must be acknowledged. An aversion to the hard work of the gymnasium is obvious in our cities. Doubtless the neglect of outdoor exercise in the better class of our population, especially the females, is to be traced in great measure to our climate, variable, and extreme in heat and cold.

This does not necessarily mean the race is deteriorating. Physical power is not the correct test of this. Symmetry of development, intellectual force, and prolonged life with health are the true standards. In these respects we are not convinced that we are behind the races of England and Central Europe.

NOTES AND COMMENTS.

Cyanchloral Hydrate.

If chloral hydrate and anhydrous prussic acid be heated together, says the *Journal of Applied Chemistry*, in a tube, for three or four hours, at a temperature of 120° to 130° C., cyanchloral hydrate is formed. This substance, when pure, crystallizes in very thin rhombic plates, is almost entirely inodorous, and very soluble in ether, alcohol, benzol, bisulphide of carbon, and water. When heated with caustic potassa, or with the car-

bonate, phosphate or borate of soda, it gives off chloroform, formic acid and prussic acid. The aqueous solution of cyanchloral hydrate may be preserved for weeks at a moderate temperature without undergoing decomposition. In the cold it is not precipitated by nitrate of silver; on warming, cyanide of silver is thrown down. Concentrated sulphuric acid precipitates it unaltered in oily drops from its aqueous solution; it then slowly becomes solid in the liquid. From a concentrated aqueous solution it is also precipitated at first in oily drops by fuming hydrochloric acid. It melts at 58° to 59° C.; becomes solid at 57.5° to 58°. It can be sublimed almost without change. With sulphuretted hydrogen it forms sulphur compounds, one of which has been isolated and is insoluble in water. When heated in water it is decomposed, sulphuretted hydrogen being given off. It is soluble in alcohol and ether, and crystallizes out of them in thin white plates of an offensive smell, like mercaptan. The alcoholic solution is decomposed by acetate of lead directly into sulphide of lead and chloral hydrate. Analysis gave 9.94 per cent. sulphur (calculated 9.73.)

The "Balm of Gilead."

This substance is obtained from the *Balsamodendron Gileadense*, or *opobalsamum*. Pereira says it is a whitish, turbid, thick, very odorous liquid, which resinifies and becomes yellow by keeping. Its physiological effects are believed to be similar to balsam copaiba and the liquid turpentines. The most wonderful properties were formerly ascribed to it. It is rarely employed by Europeans; but it is adapted to the same cases as the terebinthinates. It is mentioned by the prophet Jeremiah: "Is there no balm in Gilead?" and in several other passages. It was an article of commerce at a very early period, for it is mentioned among the goods carried by the company of Ishmaelites to whom Joseph was sent by his brethren. We learn the value placed upon it from the fact that when Jacob sent his sons the second time to the ruler of Egypt, desiring to propitiate him, he bade them "take a present; a little balm, a little honey," etc. Pliny says, "To all other odors whatever, the balsam is preferred." It was esteemed so precious a rarity that both Pompey and Titus carried a specimen to Rome in triumph. "A small piece of the resin," says Theophrastus, "was so odoriferous that it filled a large space with its perfume." He adds that in his time only two inclosures, of small extent, were known to produce this tree.

Betel-Nut Chewing.

The Eastern correspondent of the New York *Mail* writes to that paper:—There is a fascination in betel nut more extraordinary than in a tobacco passion. The consumption of the latter in chewing alone, in the United States, is a modern phenomenon. An inveterate chewer may have moral resolution enough to break off the habit, though it rarely happens that an effort is made to do so, as an apology is found for continuing a practice that is positively destroying the foundations of health. Once addicted to chewing tobacco, to abandon it is an achievement few have the happiness to perform, notwithstanding the melancholy mortality of men in the meridian of life who are constantly being destroyed by the subtle influence of that strange plant on the nervous system. Thus, sudden palsy of the heart, palsy of a limb, palsy of one half the tongue, and even instantaneous death, are traceable by physicians to excessive use of tobacco.

But the vice of betel-nut chewing, however, is still more remarkable. When the habit is established there seems no retreat. Each victim wears out his teeth, gums, digestion, and dies with an unsatisfied longing for another quid. Betel-nut trees thrive in most parts of tropical India, the Indian Archipelago, and the Philippine Islands. They grow up gracefully about thirty feet, rarely more than eight inches in diameter. It is an areea vatecha. Penang is the universal name of the nut in those places where it is produced, hence pulo penang means a betel-nut island. At six years of age the tree commences bearing nuts the size of a small pullet's egg, of a bright yellow color, enclosed in a husk similar to the cocoanut; within is a spherical nut, very much like a nutmeg. Broken, a bit of it is wrapped up with a piece of unslaked lime in a peculiar leaf, the siri betelpiper, extensively cultivated for that purpose.

The gums and mucous membrane of the mouth are quickly stained a brick red, the teeth crumble to a level with the gums, and in that condition an inveterate betel chewer is wretched without a supply. There are

large plantations of betel-nut trees in Java to meet the demand for home consumption and distant provinces. To augment the pleasure, those who can afford it add tobacco to the lime.

Position in the Reduction of Hernia.

Dr. SIMORRE recommends (*L'Abeille Medicale*, May 27, 1872) that in the reduction of a strangulated hernia the patient should be placed in the following position: A mattress having been doubled on itself, the patient is placed upon the inclined plane which results, in such a manner that his buttocks will rest on the most elevated part, and the front of the vertebral column, which corresponds to the epigastrium, upon the lowest part. His head and chest are supported by a bolster, and should be higher than the epigastrium, so that the muscles of the front of the neck, and of the chest and abdomen, shall be in a condition of extreme relaxation. The space at the foot of the bed made vacant by the doubling of the mattress should be filled up, so that the patient's feet may have a suitable support. He says that since he has had recourse to this method, in no instance has a strangulated intestine resisted his efforts at reduction.

Cocoanut Oil.

The cocoa palm is of immense importance in the countries where it grows. It yields a delicious food, a nutritious drink, a rich oil and fibres which are manufactured into thread, twine, ropes, and all kinds of strong, useful cordage.

Boiling the pulp breaks open the cells. As the oil is liberated it rises to be skimmed off. A few years ago the Dutch government ordered a census of the cocoanut trees in Java and Madeira, which footed up twenty millions, being an average of three to every native inhabitant.

Vast quantities of the oil are burned in lamps throughout the whole Indian Archipelago. A tumbler half filled with water has oil poured in to the brim. Two lighted sticks are the wicks, which burn brilliantly. Every native glories in a display of lamps in the house and about the grounds at the approach of night.

When first taken out of the boiling pot the oil has a rich flavor, but soon becomes rancid. So copious is the supply, however, it can always be had fresh and sweet for the table. Like olive oil in Syria, it is butter, lard, or oil, according to circumstances, in cookery. Soap is made with it, lamps supplied, leather dressed, and cosmetics are fabricated for beautifying the homely faces of women.

Disinfecting Chambers.

The corporation of Dublin have constructed a hot-air chamber, in which clothes and bedding are disinfected for the public, the fees charged for the process being nominal. The walls and ceiling of the compartment in which the clothes are heated are built of brick, and its floor is composed of perforated iron plate. The heat is supplied from the exterior surface of a coil of pipe eighty feet in length, which acts as a part of the furnace flue. The products of combustion escape into the atmosphere without passing into the close chamber, and no emanations from the infected clothes can pass into the open air; this disinfecting apparatus cannot, therefore, taint the atmosphere of the locality. A disinfecting apparatus of this kind should be erected in every large town. Clothes may be effectually disinfected in a common oven, if care be taken to prevent the temperature from extending beyond 300°.

Test for Iodine.

A small quantity of sulphuric or hydrochloric acid is added to a solution of iodide of potassium, containing some starch. On dropping in some permanganate of potassa, the presence of one part of iodine in 100,000 parts can be detected. This method is more sensitive than the electric current. The permanganate solution ought to contain one part of the salt in 1200 or 1400 parts of distilled water, and should have a red color, without a trace of violet. The iodide of potassium solution should contain one in 1000 to one in 10,000.

Combined Action of Morphine and Chloroform.

M. CL. BERNARD, of the College of France, has studied the comparative physiological action of the different alkaloids of opium, and has shown that it is possible, by combining morphine and chloroform, to produce a very complete anæsthetic state with a quantity of chloroform much less than is usually required when that liquid is used alone. To demonstrate this, Cl. Bernard

first injected a certain quantity of muriate of morphia (5 or 10 centigrams) under the skin of a dog, and shortly after administered chloroform. Each time the anæsthesia was produced at once, and continued some time, although the quantity of chloroform administered was very small. These experiments were repeated a great number of times, and always with the same results.

The experiment was also tried on human beings, by Nusbaum, a surgeon in Munich, and by two surgeons in Strasbourg, MM. Rignault and Sarazin.

Anecdote of Scheele.

Scheele discovered oxygen and nitrogen in air, chlorine, manganese, barytes, tungsten, molybdenum, prussic acid, hydrofluoric acid, glycerin, and citric, tartaric, oxalic, malic, tannic, uric, and lactic acids.

When the King of Sweden visited Paris, Lavoisier and all the learned men inquired about Scheele, but the king had never heard of him. He wrote home at once, and ordered his ministers to look him up. The only Scheele who could be found was a clerk in one of the government offices, so he was knighted and pensioned. But when the king returned, the real Scheele was found, and offered every inducement to take up his residence in Stockholm, but he preferred his shop in Koping, and lived and died in his little laboratory.

Arrest of Epileptic Seizures.

Dr. Brown-Séquard arrests the attacks of epilepsy excited in Guinea-pigs by irritating the epileptogenous zone, by irritating the mucous membrane of the pharynx (perhaps especially or solely of the larynx), by injecting a current of carbonic acid. The current of gas must be expelled forcibly from a tube carried far back in the mouth.

Rosenthal's (of Berlin) experiment in arresting the convulsions caused by strychnia, by pulmonary insufflation, Brown-Séquard thinks was successful on account of the irritation of the branches of the vagus in the bronchi, and of the phrenic and other nerves of the diaphragm, and not on account of the superoxygenation of the blood.

He concludes that carbonic acid is a very powerful excitant of the nervous ramifications of the vagus, and perhaps of other nerves of the pharynx, larynx, and bronchi, and that irritation of these will produce the arrest, suspension, inhibition, or, if preferred, the cessation of activity of the parts of the nervous centres which are active in the production of convulsions due to epilepsy, poisoning by strychnia, or the rapid and considerable loss of blood.

The Corpora Quadrigemina.

The investigation of these bodies by Dr. Knoll' are referred to in the New York *Medical Journal*. He found that division of the optic nerve between the eye and the chiasm produced dilatation of the pupil and paralysis on the corresponding side, the opposite side not being affected. But division between the chiasma and the brain produced these effects on the opposite side, showing that in the chiasma there is a complete decussation of the fibres which influence the oculo-motor. The action of the oculo-motor nerve upon the iris is purely reflex, since, after the division of the optic, subsequent division of the oculo-motor has no influence over the pupil.

Injury of the optic thalamus or of the corpora quadrigemina produced no effect on the pupil so long as fibres of the optic tract were not touched. If these latter fibres were injured, the iris on the opposite side was paralyzed. Injury to the corpora quadrigemina caused no disturbance of motor power.

Irritation of the anterior corpora quadrigemina produced dilatation of the pupils in both eyes, which ceased on division of the cervical sympathetic.

Paracelsus.

Naude called Paracelsus "the zenith and rising sun of all the alchemists." In the year 1526 he was chosen Professor of Physics and Natural Philosophy in the University of Basle, where his lectures attracted a vast number of students. He boasted that he was himself in possession of secrets able to prolong the present period of human life to that of the antediluvians; he had, in fact, discovered alcohol, and thought that in it he had found the long-sought elixir of life. Paracelsus determined to put it to the test; and, drinking copiously of his alcohol (with a daring worthy of a better cause), sank dead on the floor of his laboratory, a type, as Cumming says, "of man's effort to save himself, that is, to live forever."

The Usefulness of the Century Plant.

What the bamboo is to the Chinaman, and something more, the maguey was to the ancient Aztec, and is to his descendants of the present day. Every day of the year, every hour of the day, he comes in contact with it in some shape. In more than a hundred forms he has utilized it, and made it conform to his sustenance and comfort. It is the prime necessity of his simple life. It is bread, and drink, and raiment to him; he is born upon it, cradled in it, fed upon it, clothed with it, dies upon it, and is buried in it. No other plant which grows upon the earth is put to so great a variety of uses; and he knows them all.

On the table-land of Mexico one is never out of sight of it. It forms an impenetrable hedge, before which man and beast must alike turn back; around every field, and in many whole districts it is cultivated in vast fields, hundreds of thousands of plants being seen in a single plantation, ten acres of maguey to one of corn, and ten of corn to anything else, being cultivated over a section of country larger than New England.

The maguey is propagated from suckers, of which each old plant throws off a number every year. It flourishes on all soils, but is said to do best upon rather poor, clayey lands, or on hillsides among old lava. It will grow thriftily where hardly anything else can be produced; it is not affected by the long drought of summer, and will withstand a heavy frost, and even a degree of cold sufficient to form ice an inch in thickness, without injury. A more hardy plant, or one more easily propagated or cultivated, is not known in the world. It is planted out in rows about ten feet apart, and, for one or two seasons, maize or wheat may be grown upon the same ground. After that the land is used for grazing purposes, neither cattle nor sheep ever attacking the maguey, however hard pressed by hunger.

The long, thick, lance-shaped leaves, of a pale, bluish-green color, each terminating in a sharp, stiff spine, or thorn, come up from the centre of the plant in a solid cone, detaching themselves one by one, and falling outward until the whole plant has taken something the shape of a pine-tree cone, the points of the leaves at the base standing out in a circle from six to twelve feet in diameter, and the point of the roll of leaves in the centre being perhaps six or eight feet in height. The Mexicans estimate the cost of a maguey plant in the field, when arrived at maturity, reckoning the cost of planting and subsequent labor, interest, and use of land, at fifty cents, and its value for all purposes at $5. It will be seen that a field containing 100,000 of these plants at maturity represents $500,000, and there are many such in the country. Until it reaches maturity it can be applied to no use, and the plantation is wholly unproductive of revenue.

But then it yields its various products quickly, and is removed to make room for a sucker which it has thrown off to take its place and go through the same routine. After the summer rains have ceased, say in October or November, the maguey, which has reached the proper stage of development, swells up in the centre, and, in place of the upright roll of leaves, a head like that of a Flemish cabbage shows itself. This head quickly takes the form of a gigantic asparagus-sprout, six to twelve inches in diameter, and shoots up into the air with astonishing rapidity, say at the rate of from six inches to one foot per day, until the height of fifteen to thirty feet is attained, when from three to fifteen hundred or two thousand pale, greenish-white blossoms are developed, and the maguey has entered upon the last stage of its existence. From that hour it fades and droops, and soon withers away and dies.—*Overland Monthly*.

Correspondence.

Eds. Med. and Surg. Reporter:

During the intensely hot weather just past, I was surprised to see such frightful mortality among little children, and *reported* as caused by *cholera infantum*. It would be a matter of deep interest to know under what mode of treatment those deaths occurred! Whether under the care of regular practitioners, or others. With my present knowledge of the prevalence of that disease during the heated period above referred to, I am inclined to think there has been less cholera infantum this summer than usual, and that death in many of those cases was due to other causes. The records in the Health Office show that infants from two hours up to two and three days have died of cholera infantum. How can this be?

Medicus.

Philadelphia, August 9, 1872.

News and Miscellany.

Resolutions in Memory of Dr. Fish.

At a special meeting of the Medical Board of Charity Hospital, held August 5th, 1872, the following resolutions were adopted, as expressive of the feelings of the Board in regard to the death of one of their members Dr. A. H. Fish:—

Whereas, It having pleased an All-wise Providence to remove from our midst by death our friend and colleague, Dr. A. H. Fish; be it therefore

Resolved, That we, the Medical Board of Charity Hospital, express our heartfelt sorrow at his death. Earnestly believing that our loss is his gain.

Resolved, That the Secretary be instructed to express our warmest sympathy with the family of the deceased in their affliction, and that a copy of these resolutions be forwarded to them, and published in the medical journals.

American Medical Association.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

Wm. B. Atkinson,
Permanent Secretary.

Peoria County Medical Society.

The Peoria County Medical Society met in semi-annual session at Yates City, Ill., July 1st, 1872, pursuant to adjournment, Dr. H. Steele, Vice President, in the chair.

The minutes of last meeting were read and approved.

Report of special committees being in order, Dr. Marsh, committee on Practical Medicine, read a paper on acute rheumatism. The Doctor did not discuss the cause nor the pathology of the disease, assuming that all were agreed on those points, but gave the Society a statement, in detail, of the treatment. The subject was thoroughly discussed by most of the members present.

Moved and seconded that the report be received. Carried.

Dr. G. L. Corcoran, Committee on Surgery, read an article on tubercular diseases, or vomica of the bones, embracing causation, pathology and treatment.

Also, an article on the treatment of hemorrhoidal tumors by nitric acid.

Dr. Hensley, of Yates City, read two articles on minor surgery. One on congenital malformations, the other on extra cranial tumors of infants.

These special questions in surgery were discussed at length by several members of the Society. Reports received and placed on file.

Dr. P. V. R. Dafoe, Committee on Therapeutics, read a paper on the use of a combination of prussiate of iron and quinine in the treatment of neuralgia. Report received and ordered filed.

Dr. Hensley, Committee on Obstetrics, read some extracts from an unfinished article on the use and abuse of the obstetrical forceps. Continued by request to finish paper.

The following committees were appointed by the President to report at next meeting:

Surgery, J. W. Hensley, M. D., Yates City.

Practical Medicine, J. D. C. Hoit, M. D., Yates City.

Therapeutics, J. K. Secord, M. D., Elmwood.

Medical Ethics, H. W. Marsh, M. D., Elmwood.

Obstetrics, Jas. McCoy, M. D., Brimfield.

Essayist, P. V. R. Dafoe, M. D., Elmwood.

Moved and seconded that the thanks of the Society be tendered Mrs. Dr. Hensley and Hoit for the very excellent dinner prepared for the occasion. Carried unanimously.

Moved and seconded that the Secretary be instructed to furnish a synopsis of the proceedings of the Society to the Medical and Surgical Reporter, Philadelphia, and *Chronicle and Herald*, for publication.

There being no further business, the Society adjourned to meet at Elmwood, the first Wednesday in October next.

H. Steele, M. D., Pres't.

J. K. Secord, M. D., Sec'y.

Professor Harvey L. Byrd, M. D.

We learn that this distinguished physician and accomplished gentleman has, within a few days, retired from his professorship in Washington University, a school of medicine revived a few years ago by himself and one of his present colleagues—Professor Warren—and accepted the Professorship of Principles and Practice in the "College of Physicians and Surgeons," recently organized in Baltimore. Professor Byrd is extensively and favorably known in the South and West as one of the most distinguished lecturers on medical science in this country. The Faculty of the "College of Physicians and Surgeons" is composed of gentlemen of the first order of talent in their several departments, and we learn that the enterprise goes into operation under the most encouraging and flattering auspices. Such an enterprise commends itself to their fellow-citizens, and we have no doubt will receive their warm and cordial support.

Chinese Drugs.

The San Francisco *Bulletin* says, the ingredients of a witches' cauldron as described by the poet could not have been more repulsively disgusting than are the articles and compounds shipped to the Chinese physicians of this city from their native country, and used as medicines here. There seems to be just at the present time an extra demand for a venomous serpent, closely resembling the rattlesnake, and of which hundreds are received constantly. A custom-house official brought a specimen of these cheerful looking creatures to this office yesterday; a coiled snake about four feet long, fanged, and with hideous head scales like a crest. How these animals are taken by patients of Chinese doctors is not known. One would be a fair dose if disguised in a coating of sugar. They may be taken in sections three times a day, as they are dessicated, or they may be boiled down or pulverized and taken in powders, or rolled into pills. Lizards are in nearly as great demand as the snakes. These also are dried and sent over in packages, together with hundreds of other loathsome things, all of which are consigned to the Chinese physicians and used by them in their practice.

Dogwood.

In reference to the case of poisoning in Missouri from the use of Peruvian bark and dogwood bitters, a correspondent suggests that physicians should be careful in prescribing and druggists in putting up powders and extracts of dogwood. The American dogwood is astringent, aromatic and tonic, and is valuable as a remedy in low and intermittent fevers. The introduction of quinine has, however, nearly banished this substitute for cinchona from practice except as a domestic remedy. There is also a dogwood, a native of the West Indies, bearing the commercial name of "Jamaica dogwood," which is a powerful narcotic, and is used in poisoning fish. The accidental substitution of the latter of these remedies for the American dogwood would be attended with serious, and in many cases, fatal results.

Arsenical Paper.

Lately, light and dark rose-red letter papers have made their appearance in the trade, which find ready sale. Exposed to the light, however, these colors fade quickly. These rose-papers, according to Dr. H. Vohl, of Cologne, contain arsenical fuchsine coloring matter mixed with the pulp. This aniline color is much employed in paper manufacture, but on account of the slight quantity of arsenic contained in it, is not of a dangerous nature. The use of it, however, for envelopes is exceedingly dangerous, as through dampening it with the tongue it becomes absorbed in the system, and it has already caused some cases of poisoning.

Death by an Oyster Shell.

James O'Neill, ex-member of Assembly from the Ninth Ward, and Chief Clerk of the Excise Board, came to his death in a manner as singular as it was painful. At ten o'clock in the evening he sauntered out from his residence in Greenwich street, and after making a light lunch of a few raw oysters, he returned home and retired to rest. About midnight he was awakened by severe pains in the stomach. Physicians were summoned, and they, having learned that the patient had eaten cucumbers at dinner, treated him for cholera morbus, although the symptoms of his case were, in some respects, very peculiar, and baffled their skill to assign them to the proper cause. At one o'clock the pains left him, and he began to sink rapidly into a condition of coma. Two hours later, despite the best efforts of the medical men to save him, Mr. O'Neill passed away.

Satisfied that the cause of his death was one that no medicines could have removed, the physicians at once determined upon holding a *post-mortem* examination of the body. They found every organ in the healthiest condition, but discovered, while making a close examination of the stomach, that the intestines had been cut by a small bit of oyster shell, and their contents allowed to escape through the opening. The shell had evidently been in the stomach but a short time, and had, no doubt, been unconsciously swallowed by Mr. O'Neill while taking his evening lunch.

Instances of death from this cause are extremely rare. The latest to which attention had been called was that of Sergeant Babcock, of the police force, whose intestines had in a similar way been perforated by a cherry pit which he had accidentally swallowed.—*Sun.*

A Lady Centenarian.

Mr. J. W. Babson, Chief of Division, Pension Bureau, is still receiving replies to his inquiries after the health and condition of the widows of our Revolutionary soldiers. He has just heard from one who is probably the oldest widow on the pension list. The postmaster at New Matamoras, Washington county, Ohio, writes that Mrs. Lois Miller, widow of Philip, a soldier of the Revolution, was living, on the 23d ultimo, with Priscilla Hays; that she will be 109 years old on the 13th instant; that her sight is somewhat defective, but that her mind is good for one of her age.

Cost of a Kiss.

The lights and shadows of a doctor's life are illustrated by the statement which we notice, that Mr. David Davies, surgeon, of Leominster, has been fined £1 and costs for having twice kissed a lady who came to consult him as to the beating of her heart, and which he declared beat "naturally enough." Mr. Davies has probably found his system of treatment more successful in some cases.

The Late Heated Term.

The late excessively high atmospheric temperature is not without precedent, as many suppose. We find by reference to a carefully-kept register of the weather that even during the past ten years, on several occasions we have experienced as severe and more protracted heat. In August, 1864, the mercury rose to from 89 to 98 degrees on thirteen days. In July, 1865, the temperature varied from 90 to 101 degrees during thirteen days. That year was remarkable for containing the coldest day on record, January 8th, when the mercury varied from 4 to 8 degrees below zero, in different portions of the city, and the warmest recorded day, July 16th, when a temperature of 102 degrees was reached in the shade. In 1868, on eighteen consecutive days, excepting two, at 3 o'clock in the afternoon the thermometer indicated a heat between 90 and 101 degrees. This season, from the 26th of June to the 6th of July, the mercury ranged between 92 and 100 degrees.

Curious Case.

An interesting case for heads of families in England, if not in this country, came before the Court of Queen's Bench, at Westminster, recently, raising, as it did, the important question as to the liability incurred by removing persons suffering from infectious diseases, so as to endanger the health of the public. The plaintiff was a lodging-house keeper at a seaside resort, Eastbourne, and the defendant a gentleman residing in London.

The action was brought to recover damages for the losses sustained by the plaintiff through the death of his children and illness of his wife, and also from his being prevented from letting his lodgings, in consequence of the defendant having brought his family into the house when they were s ffering from scarlet fever, without stating the fact. The jury returned a verdict for the plaintiff, damages $675, with leave to move on both sides.

The March of Cholera.

A late number of the *Journal de Geneve* says:—The caravan which left Mecca on February 25th, with an effective force of four thousand pilgrims, arrived on March 10th at the tomb of the prophet at Medina. During the fortnight four hundred persons died of cholera. There were at that moment at Medina seven thousand strangers, among whom the scourge was raging with terrible severity. Before the arrival of the Damascus caravan it appeared to have abated, but it immediately broke out again with violence.

Miss Anna Hews, the young lady who recently graduated at Michigan University, at the head of a class of eighty-six students, proposes to practice medicine in New York city.

Disinfecting Washing Powder.

A new disinfectant, to be used in washing, has been described. For its preparation 100 parts of white clay, 1000 parts distilled water, and 35 parts of ordinary nitric acid are to be mixed together. The mass thus obtained is allowed to stand for a few days, being stirred frequently. The supernatant fluid is then poured off, and the clayey mass thoroughly washed with distilled water. Five parts of permanganate of potassa are now added, and the composition, when dried, is made into tablets, and wrapped in paper saturated with paraffine.

OBITUARY.

Died, on the 3d inst., of phthisis pulmonalis, at Cooperstown, New York, Dr. Augustine H. Fish, aged 44 years.

Dr. Fish was born in Trenton, New Jersey. After graduating at Princeton College he entered the office of Dr. George B. Wood, of this city, and attended lectures at the University of Pennsylvania, graduating with the class of 1851. Shortly after this he was appointed Resident Physician to the Philadelphia Hospital. On leaving this institution he commenced practice in Philadelphia, and pursued it successfully until stricken down by disease.

In the death of Dr. Fish the profession has lost one of its most active, devoted, and honorable members; one who worked in season and out of season, and who in his unselfish devotion to the interests of others fell a sacrifice to extreme labor. He was a man of refined manners and cultivated mind, a skillful physician, and a friend to the poor.

His unexpected and early death will bring sorrow into many a household beside his own.

August 6, 1872.

MARRIAGES.

Cleveland—Whittaker.—On Thursday, July 25th, in Covington, by the Rev. H. P. Walker, Dr. John L. Cleveland, of Cincinnati, Ohio, and Miss Clara B. Whittaker.

Ketchum—Slason.—In Ticonderoga, New York, July 30th, at the residence of the bride's parents, by the Rev. T. W. Harwood, assisted by Rev. J. S. Slason, father of the bride, T. J. Ketchum, M. D., of Pittsford, Vermont, and Miss M. E. Slason, of Rutland, Vermont.

Morrill—More.—At St. Paul's Church, Cincinnati, Ohio, July 17th, by the Rev. W. A. Fiske, Dr. E. C. Morrill, of Norwalk, Ohio, and Miss Mattie More.

DEATHS.

Coad.—On the 24th July, in Philadelphia, Professor P. Coad, father of the late Dr. Joseph R. Coad, in the 89th year of his age.

Corey.—At Patchogue, Long Island, on Monday, July 22, of bronchitis, Bertha Louisa, youngest child of Gertrude Elizabeth and Charles Corey, M. D., aged 1 year and 19 days.

Butcher.—At the residence of her husband, in Mauricetown, Cumberland county, N. J., July 31, Mrs. Sallie F., wife of Charles Butcher, M. D.

Feeny.—Gertrude Feeny, infant daughter of Dr. John L. and Emma L. Feeny, in the city of Portland, July 22, 1872.

Hannaford.—At Elkhart, Indiana, July 25th, of scarlet fever, Joseph Ethelbert, third child of Dr. Joseph N. and Anna M. Hannaford, aged 6 years, 10 months, and 5 days.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

HYDATID CYSTS PASSED PER RECTUM, WITH RECOVERY.

By Dr. C. C. Sherard,

Of Mobile, Ala.

I was called, March 31st, 1869, to see a married woman twenty-nine years old, of fair complexion, light blue eyes, and stoutly built, weight 160 pounds, and of good and strong constitution, who had usually enjoyed good health, except one or two slight attacks of metritis. On the evening of my first visit I found her complaining of some uterine trouble. She says that she was out in the rain the day before, and got wet. I administered an anodyne, and promised to call in the morning.

At my morning visit she informed me that she had spent a miserable night, and her pains had been very severe. I made a vaginal examination, and found, as I supposed, a lateral retroverted womb, with the fundus of the womb in the left iliac fossa. I attempted to replace it, but it gave her so much pain that I was compelled to desist for the present, and requested my friend, Dr. J. T. Gilmore, to assist me. He replaced what he supposed to be the fundus of the womb. The pain, however, continued over the womb and left ovary. There was a marked enlargement over the latter, and a great deal of soreness over the whole abdomen. Her pains continued until April 3d, when her catamenial flow came on, with an increase of the suffering, and lasted until April 8th. On April 10th I made a vaginal examination, and, as I supposed, I found the uterus still retroverted below the sacral promontory, and low down on the rectum.

April 11th I administered chloroform, and replaced what seemed to be the fundus of the womb, without giving her the least relief. In the following night there was an involuntary discharge of a large quantity of something from the rectum into the bed.

I examined the substance, and found it to be composed of hydatid cysts. She continued to pass them for five days, sometimes large quantities at a time. The swelling on the left side became much less, and on April 17th she ceased passing them. After having several operations from her bowels, she was taken with a great deal of peritoneal inflammation, which lasted some days. On April 21st she passed another large quantity of hydatid cysts during one day and a half, with much suffering. She then had two natural actions on her bowels, and they ceased.

April 26th her tongue became coated with a white thrush-like exudation, and also the fauces and throat as far as we could see. She complained of more or less trouble in swallowing for several days, but finally the condition of the tongue and fauces yielded to a wash of sulphite of soda.

April 30th Dr. Gaines and myself made a vaginal examination, and found a great deal of pelvic celulitis, and a large abscess.

May 1st Drs. Gaines, Gilmore, and myself made a vaginal and rectal examination, and found a good deal of pelvic celulitis, and an abscess and ulcer in the bowel, where the hydatids had passed through and been expelled by the rectum. They had formed

posteriorly to the womb, and near the left ovary.

May 2. At night, while asleep, there was a gush of about a quart of watery fluid from the vagina, with a very fetid smell. The discharge continued more or less all day, and she was relieved from pain. Her tongue has become more moist, and the papillæ have begun to return, though her condition has been of a typhoid tendency from the beginning of her attack. At times her bowels have been quite loose. I have been able to control them by large doses of opium. She was treated with bromide of potassium, and during the acute stage of the inflammation around the ovary she was leeched and blistered over the tumor, and kept on mercury until the gums were touched. The blistered surface was dressed with ungt. belladonna and ungt. hydrarg. This was kept up until her system was affected by the belladonna.

May 4. Her pulse has become more full and regular, and she has not been so feverish for the last day or two. She now begins to complain of pain in her back from lying so long in bed, and is not nearly so fretful or feverish as she has been for some days. The vaginal discharge has been daily decreasing, and now it ceased altogether.

May 5th. She felt a desire to go to stool, and was placed on the chamber; she passed a lump from the rectum about the size of a hen's egg, which she says looked like a piece of boiled gristle. From her description of it I was induced to believe it was the base of the hydatids.

May 6. She has a great deal of pain whenever she takes a vaginal injection, and considerable pain whenever she goes to stool. She is now gaining strength, her appetite is improving.

May 12. Spent a bad night, and complained of very severe pain over the region of the ilio-cæcal valve, and, whenever her bowels are moved, at the place where the hydatids bursted into the rectum.

May 15. Was up all day yesterday, and walked around the yard. Spent a good night, clear of pain, and bowels acted without any pain. Her continual discharge ceased, good appetite, much stronger, pulse fuller and stronger, and she is now fast convalescing.

May 16. Spent a pleasant night, free from pain, and rode six miles into the country, and from that time on has improved daily and gained a great deal of strength.

There have been some very singular features presented. In this case the first hydatids came away in bunches, and each cyst appeared to be about the size of an ordinary marble, perfectly round, as could be plainly seen by the eye. Smaller cysts were passed, and under a low magnifying power, presented the appearance of bunches of grapes. There was another singular affection connected with this case: she had been suffering for the last eight years from a very fetid discharge from both ears; as soon as she was taken sick the discharge ceased, and the swollen and ulcerated condition of the meatus disappeared.

PERNICIOUS FEVER.

By J. T. Newman, A. M., M. D.,

Surgeon to Hathaway Home, Visiting Surgeon and Physician to Charity Hospital, New Orleans.

The disease that we are about to describe is a malady germane to the yellow fever of the tropics. To those commencing its investigation, it is a matter of great surprise to observe the contrariety of opinion which has been entertained, both as regards its nature and origin. In the words of Dr. Smythe, the most eminent diagnostician of the South, it is nothing more nor less than necrosis of the blood.

But as it is not my purpose at this time to enter into its pathology, I shall proceed to give the simple progress of a case, a type very abundant in the marshy districts of the Southern States.

Patient admitted into Ward 32, January 12th, 1872. Is from the country; states that his habitation is surrounded by stagnant water, which circumstance renders him an easy victim to this most malignant fever.

His skin is hot, very dry; tongue covered with a creamy substance, which indicates that the poison is very profound. In its milder form the tongue exhibits a light red appearance.

His eyes are engorged, pulse quick, and complains of intense headache.

Ordered—

℞.	Hydrargyri chl. m.,	grs. xx.
	Podophyline,	grs. ij.
	Ext. aloes,	grs. xx.
	Ext. colocynth.,	grs. xx. M.
	M. ft in Pill No. x.	

Sig. One every three hours.

Also—

℞. Spts. ætheris nitrosi, f℥j.
Syr. rhei, f℥ij.
Tr. cinchonæ, f℥iij.
Fiat mistura.
Sig. Teaspoonful every hour.

January 14th.—Patient has had copious evacuations, which are very dark and biliary. Pulse quick, skin hot and dry, tongue foul and creamy, water red. Ordered—

℞. Quiniæ sulphatis, f℥j.
Acidi sulph. aromat., f℥j.
Tr. cinchonæ, f℥iv.
Tr. serpentaria, f℥j. M.
Fiat mistura.
Sig. Teaspoonful 3 times a day.

January 15th.—Symptoms very little altered; tongue foul and creamy; skin hot and dry; urine somewhat changed in color; stools dark; headache gone.

January 16th.—The eyes, which were terribly engorged, are now natural; the tongue still foul; pulse regular, and beating 85; stools unchanged in their appearance; appetite poor. Ordered—

℞. Acidi sulph. aromat. f℥ij.
Tr. scillæ, f℥j.
Syr. auranti cort, f℥iij.
Spts. ætheris nitrosi, f℥ss. M.
Fiat mistura.
Sig. Teaspoonful every hour.

January 17th.—Patient's skin cool and pleasant; color of urine changed; eyes clear; pulse regular.

January 19th.—Patient improving rapidly; engorgement of eyes gone; stools healthy; urine amber colored.

January 21st.—Still improving; pulse regular; bowels free. Ordered—

℞. Acidi sulph. aromat f℥ij.
Tr. cinnamoni, f℥ij.
Tr. cinchonæ, f℥iv.
Syr. auranti cort, f℥j. M.
Fiat mistura.
Sig. Teaspoonful every two hours.

January 25th.—Tongue slightly foul. Gave—

℞. Hydrargyri chl. m. grs. xij.
Fiat in chart No. iii.
Sig. One three times a day, to be followed the next morning with this mixture.

℞. Olei ricini, f℥iij.
Syr. rhei, f℥j.
Olei limonis, gtts. viij. M.
Ft. mistura. f℥ij. three times a day.

January 28th.—Bowels free; tongue clear; urine clear; pulse strong and regular; patient discharged, cured.

ON THE INFLUENCE OF ATMOSPHERIC AIR, AS DETERMINING THE CHARACTER OF PRIMARY LOCAL INFLAMMATION.

By Victor E. Henderson, M. D.,
Titus Co., Texas.

Primary Local Inflammation we define to be altered nutrition in a part, occasioned by some agency acting immediately on the part affected. This inflammatory action may be set up by numerous different causes: as, mechanical injury, concussion, caustic substances, presence of foreign bodies, etc.; for these latter I desire more particularly to claim your attention. When a foreign body intrudes itself against or into the animal tissues, an action is set up by nature, tending either to reparation or degeneration. We will divide this kind of Inflammatory action into two different characters, viz., the adhesive and the suppurative. The first of these is that by which tissues are united, loss of substance restored, protective cysts are formed, etc.; the last, that by which pus is formed, resulting in abscesses, both proximate and remote, hectic fever, mortification, etc.

We find that in healthy constitutions, where the blood and vital forces are in a normal condition, and when foreign bodies and all other sources of irritation are removed, this Primary Local Inflammation will take on the adhesive character, and reparation of tissues be effected with but little derangement to the general system; but, on the other hand, if the system be broken down by constitutional disease, the blood depraved, the vital energies weak and depressed, an irritation kept up by the presence of foreign bodies, or otherwise, the suppurative character is established, followed by all its consequences, enfeebling and debilitating the patient.

Now, it is our opinion that one of the greatest sources of irritation operating in this way, and controlling and influencing, to a great extent, the character of the Inflammation, is the presence of Atmospheric Air. In numerous instances we find that where the air is entirely excluded, the adhesive Inflammation is set up, a salutary process, where otherwise it would have ended in suppuration.

For the purpose of illustration we will cite a case which came under our personal observation:

Case.—May 16th, 1868, I. S., a native of Germany, æt. about 23, a large, muscular man, was stabbed over the sternum, opposite the third rib; we were immediately called.

The instrument used was the small blade of a sharp pocket knife, inflicting a wound about one-fourth of an inch in length; the blood was then slowly trickling down his breast; but a small quantity had been lost. We immediately ordered him removed to his home, whither he walked, a distance of four blocks, supported by an assistant at each arm.

We immediately visited him, which was about four o'clock in the afternoon; found him in bed, and examined the wound. Hemorrhage had entirely ceased externally. We found the blade to have glanced on the bone, and could pass the probe about three-fourths of an inch towards the right side and ranging a little upward, forming, as you will see, a valvular opening between the bone and integuments. We could not determine whether or not the cavity of the thorax was penetrated; he had no cough, had spit no blood, and complained of nothing except a slight pain in the lower part of the right lung.

His pulse was excited, and we administered an opiate to secure rest.

The family physician was then sent for and we saw the patient in consultation about eight o'clock that evening.

He, upon examination, agreed with us, but could not determine whether the wound penetrated the cavity or not.

Patient's condition about the same, excepting an increase of pain in lower part of right lung, which excited our suspicion.

We saw our patient again about ten o'clock the same night; the pain had become more intense, the respiration was hurried, and we discovered about one-third of the lower part of the right lung perfectly solid and dull on percussion. Upon our visit next morning we found the dullness to have invaded fully one-half of the right lung, from below upwards. He had not passed his urine, and we drew it off with the catheter, and found it normal in quality and quantity; the bladder was completely paralyzed; this symptom continued for six days.

Visiting him a few hours after, we found that the extent of the dullness had not increased, and at our evening visit, that it had receded about an inch or more; here it remained stationary; the pain had nearly ceased.

The incision healed beautifully, by "first intention." No respiratory murmur could be detected in the lower part of the affected lung, from about one inch below the nipple, either anteriorly or posteriorly.

These symptoms denoted that hemorrhage had taken place slowly, into the cavity of the thorax, compressing the lung; that it continued twelve or fourteen hours, and then ceased; that the serous portion of the blood was absorbed, and that the clot remained.

The patient rapidly improved, and in a little over a week; he was examined frequently, and his lung was always found to be in the same condition, giving him no trouble. We enjoined upon him perfect quiet, expecting every day to discover indications of Inflammation, resulting from the presence of a foreign body, and were fully determined, in that event, to open the cavity and remove the clot.

He remained in his house about six weeks, when he in every respect appeared in perfect health, and went to his business, where he was exposed to hard labor and all vicissitudes of weather. We examined him occasionally. His lung was in the same condition three months after his recovery, and he suffered no inconvenience from any cause.

This case might be passed without ever inquiring, Why this phenomenon? but direct your inquiring minds toward it but for a moment, and you will repeat the query, Why?

> "Can these things be,
> And overcome us like a summer cloud,
> Without our special wonder?"

Here is a man stout and healthy, following his daily avocation in perfect comfort, with nearly one-half of the right cavity of his thorax filled with a clot of blood. Why did this clot not act as a foreign body, the source of irritation still remaining, and excite a suppurative inflammation?

We are of the opinion that on account of the wound being small, and of valvular form, the hemorrhage was allowed to take place internally, while atmospheric air was entirely excluded.

In other closed cavities and internal organs we often find similar results; for instance, in the deposit of tubercle, when it takes place in the encephalon, we often find

it inclosed in a cyst, remaining inert, and giving rise to no symptoms by which to detect its presence during life. Professors Jones and Sieveking remark, in their valuable work on Pathological Anatomy :—

"The tubercle is generally surrounded by a delicate cyst, and when, which occasionally happens, the tubercular matter proceeds to the stage of softening, the superficial observer may mistake the morbid appearances for those of simple abscess of the brain."

In the lung, where atmospheric air is freely admitted, we constantly observe the tubercle breaking down, and inflammatory action set up, in which suppuration takes place, it being very seldom the case that we find tubercle in this situation becoming encysted.

That we do find suppuration taking place in the substance of the brain, there can be no doubt, from the teachings of Professors Jones and Sieveking, Dr. Bright, and others, although the actual presence of pus-corpuscles in the encephalon may have been but rarely detected by the microscope; but in such cases it has been produced by causes other than those which now claim our attention.

In cases of hemorrhage into the arachnoid, which usually takes place in the young subject, if they survive the primary shock, and life be prolonged, the following condition results. We quote from Dr. West's excellent work on "Diseases of Children:"—

"The clot speedily separates into serum and crassamentum, and a series of changes commences in the latter, the effect of which is to deprive it of its coloring matter, and to convert it, in course of time, into a delicate false membrane, which lies in close apposition with the parietal arachnoid." He continues: "If the hemorrhage were at all abundant, the reddish serum will, even after the lapse of a considerable time, be very evident on opening the sac of the arachnoid, and some of it will probably be found entangled in the substance of the clot. By degrees the serum loses its color, but its quantity may still continue for a long time undiminished, or the efforts of nature may even entirely fail to accomplish its absorption. The fluid, in such cases, is either simply contained within the arachnoid cavity, or, having remained inclosed within the clot during the changes which it underwent, appears at length to be situated within a delicate cyst or shut sac."

Again, we learn from Professors Jones and Sieveking, that "The processes that occur in the blood itself, after it has been effused within the brain, are: the formation of a coagulum, the gradual absorption of the fluid parts of the blood, the formation of an organized membrane around the clot, and the continued absorption of the latter. The rapidity with which these changes occur differs considerably, and depends greatly upon the healthy condition of the surrounding parts. Thus, while Dr. Macentyre has recorded a case of apoplexy in which, thirteen days after the seizure, the cyst was found fully formed, organized, and nearly empty, a French physician, Moulin, mentions one of seventeen years' duration, in which a cyst was found containing four ounces of sanguineous fluid. When the effusion occurs in the cavity of the arachnoid, we have seen that cysts also form, but we do not meet with them in the cavity of the ventricles, though there is reason to suppose that the blood may be absorbed from their surface also. According to the degree of absorption, the clot changes its consistency and color. The clot first assumes a deeper color, and becomes of a chocolate hue, and from absorption of the serum is rendered hard; the coloring matter is more and more absorbed; a light-colored fibrinous mass is then seen, much contracted from the original dimensions of the clot; and finally this too may disappear, leaving no remains of the hemorrhagic effusion but the contracted empty cyst, the walls of which are frequently connected by fibrous threads. The cyst itself, in its turn, shrinks up, and finally nothing may remain but a cicatrix."

As we have not had the advantage of a post-mortem examination in the case of the man who was stabbed, we cannot judge of the changes which took place in the cavity of his thorax, except by analogy, and we think we can judge of this with sufficient accuracy from the statements of the authors quoted.

From these facts we conclude that, although other causes operate in certain cases and conditions, in determining the character of Suppurative Local Inflammation, yet that atmospheric air exerts a powerful determining influence in this respect, and that where it is entirely excluded we have very frequent examples of the adhesive character of inflammation, or similar salutary processes, being set up.

These changes which take place, whether they be of a truly inflammatory nature or not, are designed by nature to repair the injuries done, and approach so nearly to that process that if atmospheric air were admitted, we think a truly inflammatory action would be excited, which would terminate in suppuration.

Medical Societies.

Huntsville, Ala., Aug. 9, 1872.

Messrs. Editors:

Allow me to introduce to you the Madison County Medical Society of the State of Alabama, composed of gentlemen living in the mountains of North Alabama. It was organized on the 1st of June, 1871, and now numbers eighteen members. It holds its meetings on the first Wednesday of each month.

The following is a list of its officers:

President—Allen J. Green, M. D.
Vice President—James P. Burke, M. D.
Secretary—Louis D. Carter, M. D.
Treasurer—John D. Carter, M. D.

I am, very truly, yours,
Louis D. Carter, *Sec'y.*

THE PROFESSIONAL RELATIONS OF THE PHYSICIAN AND DRUGGIST.

By Dr. John D. Carter,
Huntsville, Ala.

Read before the Madison Co. (Alabama) Medical Society.

Mr. President and Gentlemen:

In attempting to discuss the question allotted me to-day, I find myself considerably embarrassed. We have little or no literature on the subject; I have had but little opportunity of interchanging views with you, and hence am thrown on my own resources, which are very limited indeed. My views I shall give you in brief, and in a plain and unvarnished style, endeavoring to do justice to the physician on the one hand, without injuring the druggist on the other; to steer clear of Scylla without falling into Charybdis.

That these two noble professions, both of which are engaged in the amelioration of human suffering, should act in concert and in harmony no one will deny. The best means of securing this harmony of action, is one of the questions to be considered by us at this meeting. And while each has a separate and distinct field to cultivate, there is a community of interests, both professional and pecuniary, that should command the protecting care of both alike. There should be no irreconcileable differences. Both should be open to conviction, and be ready to make concessions, if needed to promote harmony and good feeling. Each owes to the other certain duties and obligations, to a faithful discharge of which they should—and I will venture to say do—feel themselves pledged.

The druggist should find it his greatest pleasure, as he will certainly find it his highest interest, to use all possible care and diligence in compounding the physician's prescriptions. The welfare of the patient, as well as the reputation of both physician and druggist, depend upon this. Directions should be written plainly, and all poisonous preparations be so unmistakably labeled as to render accidents impossible. In our town, where nearly all the physicians have their offices either in or near the drug stores, it frequently devolves on the druggist to answer inquiries as to their whereabouts, and to make a note of calls left for them. This they should do cheerfully, always feeling that the interests and reputation of the physician should be their peculiar care.

On the other hand, the physician should guard the reputation of the druggist, disabuse the minds of his patients of any erroneous impressions they may have as to his capabilities, and should give him the benefit of his counsel whenever he sees it will advance his interests. But he should never attempt to throw the blame of his own failures to cure the sick on the shoulders of the druggist, as, I am sorry to say, has been done in one instance, at least, in our city.

I know, gentlemen, that these are little things, but in our intercourse with our fellow men in every department of life little things play an important part. But, turning from the consideration of these little courtesies and acts of kindness that render the intercourse of the physician and druggist so pleasant, I come to the question of ownership of prescriptions. Here I find a diversity of opinions amongst the members of our own profession. And although the druggist has never laid claim to any proprietary interest, merely looking upon himself as the custodian of the prescriptions filled by him, he can be no disinterested spectator during this discussion, since he is to be governed by the decision as to when and under what circumstances such prescriptions are to be duplicated. As the question now stands in our city, the patient is practically the owner of all prescriptions made for him. As far as my knowledge extends, no druggist refuses to duplicate a prescription when presented by any one. Nor can he be censured until the question of ownership has been determined.

Lying thus between the patient and physician, it becomes necessary to consider this question as to its bearings upon the interests of each, as the only means of arriving at a safe conclusion

It is a well settled point that as long as a

man is sick, he ought to be under the advice of his physician. It is equally true that there are very few, if any, cases where advice can be given at the commencement of an attack that will serve through the whole course of the disease. Nor can the patient or his friends judge as to the time at which a medicine should be discontinued and another substituted. If, then, at every step in the progress of his case, the patient should find it to his interest to consult his physician, it follows, as a matter of course, that it would be unsafe for him to continue the use of any medicine without his advice and consent, and that an unquestioned ownership of the recipe could not benefit him in the least.

But let us look on the other side, and see how the physician's interests are affected. If the patient, ignoring his own safety, continues the use of medicines unadvisedly, and his case progresses unfavorably, the physician is liable to suffer in his interests. We all know with what facility the public mind lays hold of any circumstance that will weigh for or against the physician's reputation. And if the prescription is duplicated for a friend of his former patient, although his reputation may not be at stake, the prescribing physician, or some other member of the profession, is unjustly deprived of a fee. For notwithstanding he was paid for his advice at the time the prescription was made, he certainly never contemplated any such wholesale use of it. There are numbers of people who will avail themselves of such means to avoid payment of a fee to the doctor. I know a family in this vicinity that cured three or four cases of intermittent fever on one of my prescriptions, after having complained at the payment of the paltry sum of one dollar for the advice. Now ought this to be so? Ought not the physician's pecuniary interests to be protected? But the decision of this question of ownership does not hinge solely on any supposed injury to the reputation and interests of the physician. A controlling interest in his recipes is vested in the physician from the very nature of things. A prescription is merely a formula given as a guide to the druggist in compounding the medicines. It is not intended to answer any other end than the relief of their existing symptoms. Other indications will be met, as they arise, with other remedies. If the same medicine could be made to answer in all the different phases that a disease may assume, then I would say, let the patient use it until he is well. But this is not so. Even in chronic diseases, where the same remedy may be used for a great while, with advantage, it is found necessary to change the plan of treatment far oftener than we would wish, before our patient is relieved. For the good, then, of both the physician and patient, as well as a matter of right and justice, it does seem to me that the physician is the sole owner of his prescriptions, and that they ought never to be duplicated without his consent.

As to the question whether druggists have the right to prescribe, I do not think much need be said. I know of but one of our druggists who is in the habit of prescribing, and he is an M. D., and was for many years a practitioner in good standing amongst us. I do not see how any reasonable objection can be urged against him for putting up his medicines to cure the simple ailments of such as apply to him, merely because he is not in regular practice. But the honest and conscientious druggist who knows nothing of the theory and practice of medicine, will content himself with being perfect in his own art, without wishing to expose himself to the just censure that would be meted out to him should he attempt that for which he is wholly unfitted. But this question does not apply, in my opinion, to the sale of proprietary medicines. If a customer calls for a chill tonic, a cough mixture, a diarrhœa cordial, or a blood purifier, I do not see why the druggist may not sell him any article that claims to be useful in the case.

There is one practice, however, amongst the druggists of our town, against which I must be allowed to enter my protest. All, or nearly all of them, have a formula, obtained somewhere, by which they put up medicines for the cure of gonorrhœa. Now, granting their remedies to be good, and the patients cured, is not this an unwarrantable infringement upon the rights of the physician? This subject should have the careful consideration of our druggists, and we be allowed our fees in such cases.

In conclusion, gentlemen, allow me to suggest that this Society invite the druggists of this place to organize themselves into a Pharmaceutical Society, in order that they may co-operate with us in the settlement of the many points of interest that we have in common with them. I do not see any other way by which we can so effectually accomplish this desirable end.

INAUGURAL ADDRESS BEFORE THE MADISON COUNTY (ALA.) MEDICAL SOCIETY,

By Dr. Allen J. Greene,

Of Huntsville, Alabama.

Gentlemen of the Madison County Medical Association:

Knowing of matter far more attractive, presently to be submitted to you, I propose to occupy your time very briefly on this occasion. Not more, however, in obedience to the requirements of our Constitution than in accordance with the dictates of my own feelings, I ask to make my grateful acknowledgments for the honor you have conferred. And as every educated man must esteem it a privilege to be associated with others of cultivation and acquirement, so he indeed must be apathetic who could be indifferent to the honor of presiding over such.

Permit me to say, then, that in the dis-

charge of my duties I can very sincerely promise my most earnest efforts; but at the same time let me add, also, that, however well intended, however earnest these efforts may be, they can only be successful when fully sustained by yourselves. For myself, individually, I have nothing to ask in this connection beyond that courtesy due from one gentleman to another. *For the Chair*, however, as the representative of your own delegated authority, *I ask everything* that may properly pertain to its efficiency, and that may advance the interests and honorable standing of our Association. It would be an act, I fear, savoring in your estimation more of the officious than of the official, were I to parade before you the rules and regulations usually of force in deliberative bodies. There is perhaps no member who is not sufficiently conversant with their import for all necessary purposes; and whilst it might be both irksome and unnecessary to insist upon the strictest parliamentary usage under all circumstances of our official intercourse, yet I think it will scarcely be denied by any that the ends and aims of our Association will be best subserved by a reasonably close attention to them. Whilst, then, it must be apparent to us all that the firm but courteous enforcement of order and decorum should be strictly adhered to, the Chair nevertheless readily recognizes the fact that the largest liberty of debate consistent with the true interests of our Society should be allowed upon all subjects under discussion.

If I might be permitted to define, in one word, the object of our Association, that one word would be *advancement;* and if, again, I am permitted, in one word, to define the great secret of all advancement, I should select the word *enthusiasm*—devotion to and faith in the object pursued. Now, that peculiar condition of nervous exaltation which I have just named, and of which the acme is Fanaticism, although it has been, and ever will be the mainspring of all the noblest inspirations of earth—whether of literature, art, science, politics, or religion—is yet perhaps scarcely to be looked for, or indeed needed *here*. Nevertheless, if I may so express myself, there is a milder form of it, which I would define as *earnestness of purpose;* and this, I think, is not only attainable by us all, but in fact very necessary to our success. If, then, we are really in earnest, if this Association is not, in fact, a farce and an affectation, let us give that earnestness of purpose to it which will make it what it ought to be—an assemblage of thinking, working men!

Let our attendance be always punctual, and our meetings always full. In one word, let us *find excuses to come—not excuses for staying away*, and I venture the prediction that not only will our numbers increase, but our usefulness and ability will command the respect and confidence of all.

Editorial Department.

Periscope.

Hemorrhagic Malarial Fever.

The editor of the Cincinnati *Medical News* says:—

It is to be regretted that so much confusion and difference of opinion exists among writers in regard to this fearful form of fever; we find nearly every one who has written on the subject giving it a different name—one in accordance with his peculiar views of its pathology—and they differ still more widely in the matter of treatment; but all agree that the cause is undoubtedly malarial toxaemia.

The first symptom that characterizes this disease is a chill of the congestive type, marked by coldness of the surface and great internal heat. There is much anxiety and irregular sighing and respiration, which are soon followed by fever with its usual concomitants. The pulse is full at first, but not so frequent as in common remittent fever. During the first paroxysm, the symptoms that distinguish this from all other fevers generally make their appearance: Hematuria, jaundiced skin, and vomiting, apparently without effort, of a dark "grumous" fluid. These symptoms are present at some period in all cases. The bowels are usually constipated, tongue at first a straw color, which gradually deepens until a yellowish brown coat covers the whole organ; pain in the head and back; after a time, from eight to twelve hours, there is an abatement of all symptoms except nausea and vomiting. From this the patient is hardly ever free until the paroxysms are broken up. If this is not done in the first remission, we have a repetition of all that has been described, with increased violence, in addition, besides often harrassing hiccough, some confusion of thought, amounting almost to delirium, heavy sighing, countenance dull and gloomy; but the patient is anxious and alarmed when aroused.

There are some features in this disease that deserve particular attention. The remissions are irregular and sometimes ill-defined; but when the hot stage does pass off there is no perspiration. Pain in the

head at first is generally slight—often entirely absent; pain in the back, in the region of the kidneys, is very severe and incessant; great thirst; stomach irritable, with vomiting of large quantities of dark fluid almost without straining or effort. The discharges from the bowels, when moved spontaneously or by medicine, are of a dark "tarry looking substance." The color of the skin is a greenish yellow or "bronze." This symptom is generally developed very suddenly; the skin may be perfectly clear one hour and bronzed the next.

These are the principal characteristic symptoms of hemorrhagic malarial fever; other phenomena presented in the fever belong rather to individual cases, and may often be seen in malarious fevers of all varieties. The question of hemorrhage in this disease is one of great importance on account of the differences of opinion which have been, and are likely to be entertained on the subject.

It is true hemorrhages are not so commonly seen in malarial fever as in typhoid and yellow fever, but do occur frequently; and certainly the same cause must exist; weakened capillary walls and changed condition of the blood, and of course bleeding may occur from any surface. It is not reasonable, in this fever, when continued emesis constitutes one of the principal symptoms, that hemorrhage would avoid the stomach and assail the urinary organs in every case. The icteroid symptom may be accounted for as in common jaundice, non-removal of biliary coloring matter from the blood.

The diagnosis I have never regarded as difficult. The occurrence of hematuria, black vomit, and jaundiced skin distinguish it from bilious intermittent fever. From yellow fever it is distinguished by the remissions, and prevalence in localities where yellow fever was never known to visit.

This is a very dangerous disease. From what I have learned from Southern practitioners, through the journals and otherwise, and from my own observation, nearly one-half die; nor does the percentage of mortality seem to be much on the decrease.

I will not attempt to discuss the various plans of treatment recommended by different writers, but will merely suggest what has seemed to me to be the most proper and successful. I prescribe small but frequent doses of calomel, with a view to quiet the stomach and for its purgative effect. I follow it with saline laxatives until the bowels have been well purged. I permit the patient to have a reasonable amount of ice. Apply a large mustard cataplasm over the stomach and liver. (I have seen no benefit derived from blisters, which may do harm by interfering in some way with the urinary organ.) The hematuria is generally easily controlled by astringents, but I think there is often great danger in their administration for that purpose. I would prefer in a great majority of cases to let the hematuria alone, and give diuretics, as it will cease as soon as the morbid condition that induced it has been broken up by quinine. Upon this agent we must rely; without it but few if any patients would recover. I have seen patients having a dark yellow skin, with hematuria, vomiting a dark fluid, after having the bowels well acted upon by calomel and saline cathartics, take sixty grains of quinine by injection during the remission, which prevented the recurrence of another paroxysm, the patient recovering. I have seen benefit derived from sponging the patient with warm water made alkaline.

Tonics, beef-tea, and other nourishment are demanded and should be given as early as the stomach will receive and retain them. The tonic most highly recommended is a combination of iron with the mineral acids and quinine.

Operation for False Joint.

A case is reported by Dr. E. H. BENNETT, in the Dublin *Medical Journal*. He says:—

The examination of the limb showed clearly that the fracture was an ordinary oblique fracture of the tibia, the line of fracture running from above and behind, downwards, forwards, and inwards, so as to place the point of the upper fragment on the subcutaneous surface of the tibia. A sufficient time had elapsed to allow of the rounding of the sharp point of the upper fragment by absorption, a change chiefly effected by its pressure against the skin; at least, such would appear to be the correct explanation of the difference between it and the similar point of the lower fragment, which retains its original sharp and angular outline; this had lain bedded in the tissues of the limb, unexposed to any pressure, while the other had the strained integument constantly drawn tightly over it.

The nature of the injury being clearly made out, the questions next in importance were, what cause could be assigned for the non-union of the fracture? and what was to be done to render the limb useful, or at all events, to relieve the patient from his condition of confinement to bed.

There existed no constitutional disease that I could discover to explain the non-union, so I was forced to look for a local cause. The fracture, though oblique, was nothing extraordinary, and although great displacement had been allowed to occur, still the fragments appeared in apposition, and they had been sufficiently at rest, the man having been in bed with some kind of support applied to the limb for the greater part of four months. The two conditions essential to the union of fracture, rest and apposition, had apparently been satisfied.

The idea that the failure of union was the result of osteitis, suggested by some who saw the case, seemed to be set aside by the fact that the wound which had communicated with the fracture during the period of suppuration, had healed after the separation of a few minute particles of bone, and by its healing showed that no further disease of bone existed.

But two modes of dealing with the case deserved consideration, namely, amputation, or an attempt to remove, to some extent, the deformity, and induce union by resecting such an amount of bone from the end of either fragment as would admit of their reduction and the rectification of the limb, and by its performance stimulate the union of the bone.

My colleagues agreed with me in the propriety of resorting to the latter method.

On April 27th I operated, assisted by Drs. Butcher and Little.

I made an oblique incision from the extremity of one fragment to that of the other, and divided all the structures down to the bone. I then raised the periosteum with a blunt elevator from both fragments. As I attempted to do this completely, I was interrupted by a mass of tissue lying in the interval between the fragments in front; this I raised out of the space and removed. I then projected the lower fragment forwards, which was done to some small extent with facility; but, beyond this I feared to go, as the force necessary, appeared to me to be too great. I passed a chain-saw behind the fragment, but broke it in the attempt to work it. I then cut off the fragment with a powerful bone forceps, and then cut with the same instrument an even surface on the upper end of the fragment. This being done, it was easy to apply Butcher's saw to the extremity of the superior fragment, and after three transverse sections of the bone it was possible to reduce the fragments to a straight line. On the posterior part of the fragments some pieces of new bone were formed in the periosteum and surrounding tissues, but not sufficient to support the fracture and prevent motion. Before reduction was possible, it was necessary to apply considerable force in order to detach the fibula from its faulty connections, but in this way I succeeded without being obliged to expose the bone or cut it. The operation, necessarily a tedious one, was unfortunately much hurried by the bad behavior of the patient under chloroform. At one time, just as I was clearing the first piece of bone and applying the chain-saw, he showed marked symptoms of an inclination to faint, and caused me much anxiety; so that I was forced to suspend the chloroform in great measure, and make the best haste I could to finish my work. To this I attributed my breaking the chain-saw, for it was slow to start its cutting on the rough posterior surface of the bone, and was broken by too hasty action. I had been prepared to use Dieffenbach's pegs, in order to stimulate the union of the fracture, but for two reasons I laid them aside. First. I considered that I had found a sufficient cause for the non-union of the fracture in the mass of tissue which I found interposed between the parts of the fractured bone. This mass of tissue was, as far as I could judge during the haste of operation, composed of muscle and tendon. Secondly. I considered the condition of the patient, resulting from the effects of chloroform, too dangerous to allow of any prolongation of the time of operation, beyond what was absolutely necessary to effect the reduction of the fracture.

No ligature was used during the operation, and but slight oozing of blood occurred after reaction set in. For more than an hour after the patient was removed to bed, the lower segment of the limb caused me great anxiety, for it was cold, livid, and its vessels were pulseless, but gradually it recovered its heat and color, and the arteries could be felt beating. The limb was put up in a box-splint, with the knee slightly bent and raised; except for trouble caused by sloughing of the heel, and of the skin over the crest of the tibia, caused by the pressure required to retain the fragments in the straight position, the case progressed steadily, though very slowly, to recovery.

The patient was discharged from hospital on January 6th, 1872, and returned to Kilkenny, able to get about with a crutch and stick, the bone firmly united, and nothing but time and use required to establish the full action of the limb; the shortening was barely 2½ inches, rather less than that of the limb before operation.

The Effect of Ergot in Utero-gestation.

Dr. JOHN DENHAM says, in the "Proceedings of the Dublin Obstetrical Society":

For some time past we have been engaged in observing the effect produced by ergot during the period of utero-gestation; and we have had forced upon us the conviction that ergot, if given, say between the sixth and ninth months, neither affects the life or health of mother or child, nor does it bring on labor until the full period of utero-gestation is completed. Permit me to give the details of one of the cases alluded to:—

Jane Doyle, a fine, healthy young woman, from the country, unmarried, and, according to her own account, not pregnant. Was admitted into the chronic ward in May last. The fœtal heart was distinctly audible. On 18th, 21st, and 23d of May, she got 20 gr. of freshly powdered ergot three times each day without producing the slightest perceptible effect. Early in June we gave her ʒj. of liquor ergoti three times a day for seven days almost consecutively. It produced no effect whatever, except to sicken her very much, until at length she refused to take it any longer. She remained in hospital, nevertheless, and was delivered on 26th July of a healthy male child, with nothing whatever remarkable in its appearance. This woman took 12½ drachms of ergot.

It frequently happens that women come into hospital suffering from spurious pains, but not in labor, although they have reached their full time. In such cases we have often remarked that the ergot, if persevered in for a day or two, generally brought on the labor. For example, Mary Wickham, aged twenty-nine, admitted on her second child, on 25th June last. Found not in labor. She was ordered three draughts, containing ʒij. of

liquor ergoti. On 23th the ergot seemed to have produced no effect, and the draughts were ordered to be repeated every fourth hour. Her labor came on in the course of this day, and she was delivered of a fine healthy child at 9.50, having taken in the two days an ounce and a-half of liquor ergoti. We do not believe that the giving of ergot will bring on abortion in healthy women, even where there has been some threatening of it; but if the process has really set in, then the ergot rapidly hastens it. In numerous instances of threatened abortion we have given it with a hope of either arresting the hemorrhage or bringing on the abortion, but apparently without any effect, as the hemorrhage has gradually ceased, although we could not attribute that to the ergot, and the women have often gone on to the full period and given birth to healthy children. Our experience of ergot has not, I regret to say, increased our confidence in it as a remedial agent in *post-partum* hemorrhage, either before or after the expulsion of the placenta. Before the removal, because it induces a condition of the uterus unfavorable to the introduction of the hand should that operation be found necessary. After the removal of the placenta, because of its depressing effect on the circulation and nervous system, and because it very often induces nausea and vomiting, but especially because we have not found it to produce its specific effect on the uterus after it has been entirely emptied of its contents; and further, because we almost invariably find that steady pressure on the fundus with the hand, and the free application of cold water, both externally, and more especially the direct introduction of it into the vagina and uterus by means of a gum-elastic tube more prompt and efficacious than all other remedies. Where from the previous history of the patient we have reason to apprehend *post-partum* hemorrhage, we never fail to give ergot towards the end of the second stage of labor, and with the happiest effect. To Dr. Beatty we are indebted for this valuable suggestion in the treatment of hemorrhage, and it is one of great practical importance.

In cases of tedious labor, even where the delay arises from simple inertia, and in which the ordinary remedies, such as change of position, stimulating injections, etc., fail, we do not so often give ergot as we formerly did, but prefer using the forceps, by which we believe the mortality of both mothers and children has been considerably diminished. Our experience of ergot during the period of pregnancy has led us to the following conclusions:—1st. When given to a pregnant woman, even in repeated doses, at any other than the full period, it produces no effect whatever beyond nausea and loss of appetite. 2d. It produces no injurious effect upon the fœtus in utero. 3d. Where the process of abortion has commenced, the ergot hastens it materially, and acts very beneficially. 4th. When given in the second stage of labor, it often acts beneficially and hastens the labor, but if the labor be not soon completed, it is attended with great danger to the child, not from any toxic effect of the ergot, but by the mechanical obstruction it offers to the circulation, and the continuous and powerful contraction exerted on the child.

In *post partum* hemorrhage after the expulsion of the placenta, we do not believe it exerts much influence on the uterus, therefore we seldom use it in such cases; but rather trust to other remedies already alluded to.

There are few countries in which charms or medicinal agencies do not and have not existed for the purpose of inducing labor or increasing uterine action. For example: in a work lately published by a Mr. Whimper, on British Columbia and Vancouver's Island, he mentions that the tail or rattle of the rattle-snake, in powders, is used as an infallible remedy for inducing or increasing uterine action. And in our own country, Erin's green isle, the shaking of a laborpatient, or waving her backwards and forwards nine times, and then giving to her nine grains of blasted corn or grain, was looked upon as a certain means of bringing on or increasing uterine pains.

It is possible, perhaps probable, that our American friends who claim credit for the discovery of ergot as a therapeutic agent in the practice of midwifery, are indebted to some wise old Irish crone, who emigrated to that land before many, now present, were born, for the hint which led to the discovery of this medicine now so generally used, and, I may add, often abused.

Stone in the Female.

Dr. PLUM has on this subject the following remarks, in the *Dublin Medical Journal*:

The method of operation, which may be considered the principal one in the treatment of vesical calculus in women, is certainly that of *lithotrity*. This procedure is far more easily carried out in their case than in that of men. The short, straight, and wide urethra enables the operator to manœuvre easily with the lithoclast in the bladder; there is no prostate; and the fundus of the bladder is dilated downwards somewhat pouch-fashion, so that an assistant, by introducing his finger into the vagina, can aid in lifting up the stone between the blades of the instrument. Lastly, the crushing does not require to be so fine in the case of women as in men, as even the larger fragments can readily pass out through the wide urethra. The lithoclast is also admissible in the case of female children. Fergusson, for example, has repeatedly employed it with success: amongst other instances, in a little girl of five years, in whose case in two sittings, at an interval of a fortnight, he crushed and removed a stone. The only inconvenience that this operation labors under in women more than in men is that the patient frequently experiences difficulty in keeping back the urine during the process, so that it strains out at the side of the lithoclast, and

that without the possibility of preventing it, as in men, by compressing the urethra against the instrument.

It is certainly quite beyond dispute that we would prefer lithotrity in every case of vesical calculus in a woman if this operation were admissible in all instances, but this unfortunately is not so. Sometimes the stone is so large, or so hard, that it is impossible to crush it, and in other cases a condition of the bladder—a considerable inflammation or irritability—affords a contra-indication for lithotrity. In such cases, if we except dilatation of the urethra, we have only the operation of cutting to fall back upon, and this too is very often practiced, numerous methods of various kinds having been described in the case of women as in that of men.

The high incision over the symphysis pubis has been resorted to. The anterior wall of the bladder has been opened by a transverse incision between the urethra and symphysis, the so-called "vestibular" operation of *Lisfranc*, a procedure which is so very objectionable in all respects that it is now scarcely ever used. Urethro-vesical incisions in all possible directions have been made—upwards, downwards, outwards—most frequently, indeed, obliquely outwards and downwards towards one or both sides, corresponding to the lateral and bi-lateral incision in man. Lastly, the bladder has been entered from the vagina by the vesico-vaginal incision, or "kolpo-cystotomy," as it is called.

If anatomical conditions in women are considered, and if we seek for a place where the bladder may be opened to a sufficient extent without wounding the peritoneum, or any large vessels, the last-mentioned operation that by a vesico-vaginal incision, appears to stand forth as the easiest and most natural. And if it has not hitherto been very extensively employed, the reason certainly is this, that we were formerly helpless against vesico-vaginal fistula, which was regarded as, and really was, an almost unavoidable consequence of the operation. We, in performing it, secured a new complaint for our patient, a complaint in no wise inferior to that from which she had been set free. This state of things has, however, become quite altered with the progress of our time in this direction.

The successful results which have been obtained of late years from the operation of vesico-vaginal fistula, according to the American method, should naturally place kolpo-cystotomy under far more favorable circumstances than hitherto, for we can now be pretty nearly certain of being able to close the fistula produced by the operation, and if the apprehension of causing a permanent vesico-vaginal fistula is once removed, it seems to me that all objections to kolpo-cystotomy must fall to the ground.

The length of the anterior wall of the vagina is sufficient to enable us to form an opening large enough to remove a stone of fully as great a size, at all events if we divide it in pieces, and that without coming into collision with important anatomical parts, without any special hemorrhage when the incision is made in the middle line.

This operation has now also been adopted anew in most countries, and if, in the literature of late years, we meet with only individual communications respecting it, this no doubt arises alone from the rare occurrence of such cases, just as the reason why some very recent surgical authors, as for example Linhart and Emmert, seem not to share the view here propounded of the subject, and in their text-books devote but a few words to kolpo-cystotomy, is no doubt alone to be sought for in the very small experience of these authors in this procedure.

After having learned from the operation for vesico-vaginal fistula how readily even considerable deficiencies in the vesico-vaginal wall may be closed by a careful paring and accurate adaptation of the edges, we may, without losing sight of the subject of kolpo-cystotomy, go even a step further, and endeavor, by all means, to prevent the formation of fistula, by bringing together the wound with sutures, immediately after the removal of the stone. The operation has been successfully practiced in this way, first by Marion Sims, and by Vallet, of Orleans; in England for the first time, with a partially successful result, by James Lane, in 1862, after Paget, of Leicester, had previously tried it, without the union being completely successful. Subsequently several satisfactory operations of this kind have been performed by Lyon, of Glasgow, Aveling, of Sheffield, and Baker Brown.

The only condition under which the operation appears to me necessarily to be exposed to considerable difficulties is in children; but even in this case, experience shows that the difficulties are not insurmountable. Fergusson has removed a mulberry calculus the size of a walnut from a girl 9½ years of age by kolpo-cystotomy, while the attempt to close the wound with sutures failed. Paget has undertaken the operation in a child three years old, and Simon, lastly, has communicated in the 12th volume of Langenbeck's *Archiv. fur Klinische Chirurgie* a very interesting case, in which he succeeded in a girl eight years of age—certainly with much difficulty and only after repeated operations—in closing a vesico-vaginal fistula 5½ centimetres in length, that had been produced by the ulceration of a calculus through the wall of the bladder.

Treatment of Chorea.

Dr. Ed. Montgomery says, in the *Northwestern Medical Journal*:—

The causes of the disease being so various, our treatment should also vary in different cases so as to adapt our remedies to the modification or removal of the predisposing and exciting causes of each particular case. When the disease depends on anemia, malnutrition, or an altered condition of the blood, favorable hygienic measures with

tonic medicaments are indicated. In these forms of the disease strychnine, quinine, arsenic, zinc, iron, etc., are the medicines from which most good is to be expected. The following is a favorite prescription of mine in these cases:—

℞.	Strychnia,	gr.j.
	Quiniæ sulph.,	ʒj.
	Acidi phosphorici dilut.,	fl.ʒj.
	Aq. menth. virid.,	fl.ʒvj.
	Tinct. cardam. comp.,	fl.ʒj. M.

Sig. A teaspoonful three times a day, for a child eight or nine years of age.

The citrate of iron and quinine, or Fowler's solution of arsenic with the tincture of cimicifuga racemosa, are remedies well adapted to this form of the disease.

When there is exalted nervous sensibility or hyperæsthesis, musk, asafœtida, castor, valerian, zinc, etc., will be found of essential service. A very good prescription is the following:—

℞.	Moschi,	gr xij.
	Zinci oxidi.,	gr.xxiv.
	Sacchari,	ʒj. M.

Divide in powders No. xii,

S. One powder three times a day for a child aged eight or nine years.

The only objection to the above is the expensiveness of the musk.

Another very excellent compound in these cases, is this:—

℞.	Zinci sulphâtis,	gr.xxx.
	Ext. valerian (fluid),	fl.ʒj.
	Syrup limonis,	fl.ʒiij. M.

Sig. A teaspoonful three times a day, gradually increasing the dose.

I have found this prescription act most happily and promptly, stopping the choreic movements in a few days. To a watery solution of the sulphate of zinc may be added the tincture of castor, musk, cimicifuga; or any of these tinctures may be added to Fowler's solution, or the fluid extract of valerian, and it is well to have a variety of forms so as to administer that combination which is most grateful and most efficacious to the patient. If pills can be swallowed, zinc and asafœtida can be given in that form with very flattering prospects of success. We have very great faith in the efficacy of zinc in a great many cases of chorea; either the oxide or the sulphate will answer; we should gradually and steadily increase the dose and keep giving the medicine until the desired results are obtained. We have such a confidence in the efficacy of zinc in the great majority of these cases, and we have had such remarkable success with it that we consider it almost a specific; a great many years ago we cured a young woman, aged twenty-three, who had been constantly suffering with the disease for ten years; in this case, besides the zinc, we prescribed the strychnine and quinine mixture; and also gave Vallet's carbonate of iron pills freely. It is important to pay attention to the bowels; when sluggish or torpid, the following prescription will be found particularly appropriate in this, as in many other diseases attacking patients of weakly or nervous constitutions:—

℞.	Ext. belladonnæ,	gr.ij.
	Ext. nucis vomicæ,	gr.iv.
	Ferri sulph. exsic.	ʒss.
	Pulv. aloes soc.,	ʒij. M.

Divide into twenty pills, and give one night and morning, or one every night as the case may require, until the bowels become perfectly regular.

We can confidently recommend the above pills in cases of chronic constipation; by taking one every night and morning for a short time, then one pill a day for a few days, then one pill every two or three days, in a few weeks the medicine can be dispensed with entirely. If the patient cannot swallow pills, the following may be substituted for them:—

℞.	Ferri citratis,	ʒj.
	Tinct. belladonnæ,	fl.ʒj.
	Tinct. nucis vomicæ,	fl.ʒij.
	Tinct. aloes,	fl.ʒij.
	Syrupi limonis,	fl.ʒxiij. M.

Give a teaspoonful, or more, according to age, every day, or more frequently if necessary.

This formula for an aperient mixture we have found a very excellent one; it does not nauseate or sicken the patient, but on the contrary gives tone and energy to the digestive organs and removes the tendency to returning constipation, thereby obviating the necessity of giving frequent purgatives.

If we suspect endocardial disease, embolism, arachnoid effusion, or softening of the nervous centres, we may not be able to accomplish much with medicines, but even in these cases we would urge the employment of the iodide or bromide of potassium, carbonate or hydrochlorate of ammonia; etc. The most favorable hygienic conditions are necessary in these cases.

Uterine Movements and their Cause.

The *British Medical Journal* quotes from a short paper of considerable interest to gynæcologists, by Drs. ASER and SCHLESINGER, in No. 52 of the *Centralblatt fur die Medicinischen Wissenschaften* for 1871:—

From numerous experiments, chiefly made on pregnant rabbits, in which the uterus was generally at rest when they began their observation, they discovered that, whenever the blood which circulated either through the brain or through the uterus itself became extremely venous, tetanic contraction of the uterus took place. As is well known, the blood which is contained in the vessels of any part of the body may be rendered venous in several ways. It may be done by stopping the respiration, so that fresh air is prevented from reaching the blood in the lungs; in which case the blood becomes venous throughout the whole body. Or the same effect may be produced by arresting the cir-

culation in a part, by tying either the arteries going to it or the veins returning from it, when the blood stagnates in the vessels, and becomes completely venous; so that this part of the body is, as it were, suffocated, while the rest of the body is well supplied with arterial blood. A third way of producing this condition is by bleeding profusely, so that too little blood is left in the body to keep up the circulation. Accordingly, the authors found that when respiration was stopped in curarised rabbits, violent contractions of the uterus occurred in from ten to thirty seconds afterwards. This was due to the venous blood irritating the brain; and the same effect could be produced by cutting off its supply of blood through ligature of the innominate and the left carotid and subclavian arteries. Bleeding the animal nearly to death acted still more rapidly, and produced tetanic contractions of the uterus in between five and fifteen seconds. The irritation of the brain, which produced uterine contractions, was conducted down the spinal cord to the uterus; and when the cord was divided, irritation of the brain in any of the ways just mentioned produced no effect. Stagnation of the blood in the uterus, produced by compression of the aorta, caused uterine movements of the same tetanic character, but which did not begin till the compression had been kept up from seventy to one hundred seconds, and were occasionally rather weaker than those which originated in irritation of the brain. If spontaneous movements of the uterus were present, they soon ceased after compression of the aorta was begun; and when arterial blood was again allowed to circulate through the organ by removing the compression, a strong contraction of the entire uterus, quickly followed by rest, took place.

Pendulous Abdomen in Pregnancy.

Dr. D. W. THOMAS says, in the *Medical Herald*:—Pendulous abdomen often proves a serious obstacle to successful natural labor. I am not aware that much importance is attached to it by writers on the subject, yet I am confident that labor is at least greatly retarded. Two cases which have proven disastrous under our observation during the past year have led us to give this difficulty more attention than we have hitherto done. In the one case, successful delivery of a dead child was with very great difficulty effected by the long forceps. In the other, the result was more unfortunate, as mother and child succumbed. The long forceps were attempted, but failed, as all the force which could be used but drew the child more tightly against the pelvis. The turning was finally resorted to, and delivery effected after much difficulty. But by this time the mother was borne beyond the point of recuperation, and died about six hours after delivery. Each of the above women had previously borne a number of children, and had been subjected to hard labor over the wash-tub, and I had attended each of them in previous labors, which were attended with no untoward circumstance. In each of the cases the weight of the abdomen rested nearly on the anterior surfaces of the thighs, thus evidently binding the uterus in such manner as to render the force of the uterine contractions ineffectual, by the abrupt angle which the child must make in its passage. Protection against such a condition we think could be had by the adoption of a firm bandage a few months before labor, relieving the relaxed muscles of the abdomen from the heavy weight of the gravid womb.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

The Mother's Register; Current Notes of the Health of Children. From the French of Prof. J. B. FONSSAGRIVES. New York: The *Nation* Press. John Ross & Co., 1872. First vol., Boys; second vol., Girls. 8vo.

This Register is designed to be a record of the principal events in the physical history of children. The headings are printed, and sufficient blank space left to fill up with the facts about the child. The general headings will give an idea of the class of facts recorded. They concern Descent, Birth, Nursing, Weaning, Vaccination, Teething, Growth, Walking, Indispositions, Eruptions, Diseases of Infancy, Sight and Hearing, Habits, Exercise, Mental Exertion, and Accidents. Notes are added at the foot of the page, explaining what points might not be understood or appreciated by the mother; while the Author's Preface shows in clear language the value of such a record to the child in after years, and to the parent while her offspring is immature.

The eminent author, Prof. FONSSAGRIVES, well known in France for his many valuable works on hygiene and popular medicine, has prepared these schedules with great care and completeness. Their value, if generally adopted, could hardly be over-estimated; and as they are easily comprehended, and kept with so little trouble, physicians will do well to commend them extensively in their family practice. Thousands of American mothers would gladly use them were they made aware of their existence and their purpose.

The American translator has done his work judiciously, and what changes he has made in the original are only such as to adapt it better to the needs of American life.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 17, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

CHANGE OF AGENT IN NEW YORK.

Mr. Z. P. HATCH being absent a great deal from New York, and the necessity of having an active agent and a convenient office in that city constantly increasing, we have appointed Mr. GEORGE KEMPTON, No. 194 Broadway, as our New York agent. We feel assured that subscribers, advertisers, and others in New York and vicinity, who may find it convenient to transact business through that agency, will find Mr. KEMPTON attentive, prompt, and correct in his business transactions.

Mr. HATCH retains the agency of the HALF-YEARLY COMPENDIUM.

MEDICAL TESTIMONY.

Those who would be glad to see medicine asserting itself as a reliable art before the public mind cannot but read with unmingled regret the testimony of the physicians and surgeons in the recent trial of STOKES, for the alleged murder of JAMES FISK, Jr.

Among the medical witnesses subpœnaed for that occasion were several quite eminent in New York city, and who, one would suppose, would manifest some unanimity of opinion about, at least, the most important points in the diagnosis and treatment of an uncomplicated case of gun-shot wound; or, if they disagreed, would only do so on urgent and positive grounds; and if such grounds existed, would express their honest disagreement about uncertain questions in reserved and measured language; and, at least, if it was necessary to enunciate the most decided disagreement, in unmistakable terms, that this would be done with due regard to the rules of courtesy which govern gentlemen, and an absence of vulgar personal invective.

In every one of these points the testimony shows that several of the medical witnesses violated every expectation of the kind. The most positive opinions were expressed and defended with intemperance in language and almost scurrilous defamation of other medical men.

Two points especially illustrate this:

It is known to all our readers that the defence would like to have shown that FISK died of too much probing, or else too much morphia. In order to establish these views they led certain of the medical witnesses to express themselves positively and without any reserve, on questions which must have been subject to doubt in their minds, and which, under the cross-examination, they clearly showed were founded on partial or insufficient evidence.

In order to advocate the propriety of his criticisms—which were unsparing—of the practice adopted in the case, one surgeon was obliged to make the following shifts, under the cross-examination of Mr. FULLERTON:

Q.—Do you ever administer opium? A.—Frequently.

Q.—Do you ever in cases of shock? A.—Primary stages. (?)

Q.—Any stage? A—Never in the first stage.

Q.—Repeated? A.—Not in large doses.

Q.—Repeated? A.—After the irritability of the shock has passed away and the depression has passed, and the sequence of the shock has come, then opium in small doses can be given.

Q.—Repeated? A.—I administer it in sequences of shock.

Q.—Repeated? A.—No.

Q.—Don't you call the sequence of a shock a shock? A.—No, sir, I never do, but physicians are apt to differ about the stages of shock.

Q.—Do you consider collapse a sequence of shock? A.—I consider it a part of the shock itself.

Q.—Wouldn't you have given opium in such a condition as this? A.—No, sir. There is a certain peculiar condition when the patient is irritable and restless, although he may have got over the shock; you may then give a grain of opium.

Q.—You would give a grain? A.—No, I would not.

Q.—Wouldn't you give any? A.—[Hesitating.] I would give half a grain.

Q.—Suppose the irritability continued, what would you do then? A.—I might give another half grain.

Q.—After waiting awhile and the restlessness continued? A.—I might possibly give him another half grain, but after this continued to a certain extent I would stop.

Q.—We haven't got to that extent yet. [Amusement.] A.—I might give something else.

Q.—I am not asking you what you might do, but what you would do? A.—I should stop the opium and try something else.

Q.—Suppose, after giving opium, the irritability subsided so as to make you think that the opium had been of service; and suppose the irritability afterwards recurred, what would you do? A.—Oh, you are putting a theoretical question now.

Q.—And I want a theoretical answer, sir, right out of your practice. [Laughter.] A.—I might give half a grain of opium, but I would not stick it into a man.

Q.—What do you mean by "sticking it into a man?" A.—Hypodermic injection means "sticking it in," don't it?

Q.—Yes. A.—O, [triumphantly smiling,] then I am right, am I not?

Q.—You sometimes stick it in, don't you? A. [Hesitatingly.]—Very seldom.

Q.—You do sometimes? A.—Yes sir.

Q.—Is not the effect of this introduction under the skin more quickly perceived? A.—Yes, sometimes; not always.

Q.—Does it last long? A.—Sometimes; it depends on whether it gets into the circulation or simply into the cellular tissue.

Q.—How long does the effect of half a grain of opium continue when injected? A.—I never gave under the skin a half a grain; I consider it dangerous.

Q.—If irritability should return again, and the patient should ask for more opium, would you not regard it as some little evidence that the effect of the morphia had passed away? A.—What a patient asks for is nothing. Yes, sir, a little.

Q.—Suppose, at four o'clock in the morning, a person injured should ask for a glass of water, and take the vessel in his hands and drink, would you regard it as some little evidence that he was under the influence of opium to any great effect? A.—It might be considered that the effect was passing away.

Q.—Persons die of shock, don't they? A.—There are exceptional cases, as you say, [smiling] it depends on the vital energy of a man to a large extent.

Q.—A person's vital energy don't depend on his size or apparent robustness? A.—It depends on his courage.

Q.—Do you believe that a person wounded as FISK was could help sustaining a shock? A.—He must have had a shock; it follows necessarily.

Q.—Is there such a thing as a person sustaining a shock without having external evidences of it? A.—I should think not.

Q.—Now, will you tell the jury what, in your judgment, he died from: you say you saw the treatment, and have a general idea of it? A.—I shouldn't think it was shock.

Question repeated. A.—I didn't see him enough; I didn't see him toward the last.

In somewhat similar style is the following evidence of another physician on cross-examination by Judge FULLERTON:—

Q.—You say, then, from that, he must have died from morphine poisoning.

Mr. TOWNSEND—He did not say that at all.

The COURT—Yes, he did; he twice stated that death was caused, according to the appearances, by opium poisoning.

Mr. FULLERTON—You say, then, that from the symptoms that have been read, the man must have died of opium poisoning? When a person dies of opium poisoning, what are the effects? A.—I expect to find effusion of water on the brain, or congestion.

Q.—But how if you don't find that? A.—I simply say that account is insufficient.

Q —Don't you learn from the post-mortem that the brain was healthy? A.—Yes.

Q.—Well, does that imply that he died of effusion or congestion? A.—I am not prepared to say; what is written there is, in my opinion, absolutely useless.

Q.—Never mind that, then. If the brain was healthy—no congestion, no watery effuson—did that imply he died of morphine poisoning? A.—I must answer my questions in my own way.

Q.—No you won't. You'll answer the questions as they are put to you. Why do you say that he died of morphine poisoning, when the post-mortem shows that the brain was healthy? A.—My answer is grounded on the description and the post-mortem.

Q.—Do you confine yourself to the symptoms during life? A.—They were not read together; my answer was made on the symptoms.

Q.—Yes; but after the reading of the post-mortem you said that he died of morphine poisoning; but you don't predicate that opinion on the conditions after death? A.—No; I referred to the symptoms during life.

Q.—Now you commence to take a new departure. Now, if you learn that after death the brain was healthy, would you then adhere to the opinion that he died of opium poisoning? A.—From what I have seen of opium poisoning, and what I have seen of post-mortems, I should expect there would be cases where the opium could not be found; I would have to look over the records before answering that question.

Q.—Ah, then you are not prepared now? Can't you state whether if upon the post-mortem examination the brain was found healthy, no watery effusion, no congestion, the person died of morphine poisoning? A.—I should think it very doubtful; we don't pretend to be absolutely certain of anything in medical practice.

Q.—You have given your answers to the counsel on the other side based on facts assumed by the counsel. It was a mere answer given on a hypothetical question? A.—Yes.

We do not intend to comment on this testimony, nor have we quoted the vulgar personalities which some of these surgeons indulged in toward each other. Any honorable medical man reading the medical testimony in this trial must feel that many portions of it are disgraceful to the profession, and certain to sink it in the opinions of the best class of the community. The conclusion that we draw from it is, that summoning medical witnesses to testify against each other subserves no end of justice, degrades the profession, and ought to give place to the system of medical experts.

Notes and Comments.

Action of Medicine.

Dr. Allen D. Mackay, of Stony Stratford, England, says, in a recent address:—The greatest problem in medicine, the action of drugs, is still unsolved, though much is being done towards its solution. For its fair solution, however, a very candid and observant mind is required; a mind thoroughly unbiassed by any preconceived dogma, and one that can study facts alone, with due consideration for adventitious matter—that can, in fact, sift "the wheat from the chaff." To judge by the wonderful array of new preparations advertised as recommended by some "eminent physician," one would think we had a specific for nigh every disease; whereas to my mind, and I doubt not to the minds of many whom I am addressing, the longer one lives and deals with drugs, the greater faith one has in those that have stood the test of years when properly applied. It is true, ever and again a new useful drug crops up, such as in our time have been iodide of potassium, bromide of potassium, chloroform, chloral, and perhaps some few others; but in those wonderful combinations of three or four drugs together, which are daily advertised in our journals, I have little faith; nor do I think that the multiplicity of drugs in prescribing is desirable, if we are ever to attain to an accurate knowledge of their therapeutic uses. The therapeutic effects of drugs must be studied, each one solely and alone; and in this all of us can more or less assist, and so each in our little sphere help forward that which we must all have at heart—the foundation of medicine on a rational basis. I say that all of us, wherever our lot may be cast, can help this matter forward. A pencil and a scrap of paper in our pocket

can note down all we want, and at our leisure we can copy down more indelibly the effects we have seen; but a fair and unbiassed analysis of results must be insured.

Death after taking Hydrate of Chloral.

F. JOLLY (*Bayer. Ærztl. Intell.-Blatt*, 1872, Nos. 13 and 14) states that in the course of two years, during which he has employed hydrate of chloral in the treatment of the insane, he had met with two cases of sudden death following its use. The dose was in each case below the average, and the chloral was chemically pure. The patients during life presented no contraindications to the use of the remedy. One had taken the chloral at night for four evenings in succession; on the fifth evening, after taking it, the respiration and circulation at once ceased. The necropsy showed anæmia of the brain, acute œdema of the lungs, hyperæmia of the abdominal organs, a perfectly healthy heart and vessels, and dark fluid blood. In the other case, chloral had been given twelve days in succession, with the effect of producing sleep after a short stage of excitement. On the thirteenth day the patient died, after some stertorous breathing, a quarter of an hour after the dose. There was here found moderate œdema of the lungs; the blood was fluid, but normally distributed; the heart was large and flabby, and its muscular structure was pale, but not friable.

Subcutaneous Injection of Ergotin in Uterine Fibromyomatous Tumors.

Dr. HILDEBRANDT, of Königsberg, has used subcutaneous injection of ergotin in nine cases of uterine fibroid. He employs a solution of 3 parts of aqueous extract of ergot in 7.5 parts of distilled water, and the same quantity of glycerine. Langenbeck's solution he has found to produce pain, on account of the alcohol contained in it; while the use of the solution which he recommends is unattended with pain, and is not followed by suppuration. Somewhat tender indurations are now and then left for some time at the seat of injection. In general, however, the treatment is unattended with inconvenient results. The lower part of the abdomen is more sensitive to the puncture and the injection than is the neighborhood of the umbilicus. At the time of menstruation, and for a few days before and after, slight bleeding takes place from the punctures. The general result of the injections has been a diminution of the tumors; and Dr. HILDEBRANDT accounts for this by supposing that the increased compression produced by the ergot interferes with their nutrition, and leads to their degeneration and absorption.

Comparison of Disinfectants.

The value of various substances for disinfecting and clarifying is expressed by the following figures, according to Professor FLECK:—

	Per Cent.
Chloride of lime disinfected	100.0
Caustic lime disinfected	84.6
Alum disinfected	80.4
Sulphate of Iron disinfected	76.7
Chloralum disinfected	74.0
Chloride of magnesium disinfected	57.0

The disinfecting and clarifying power of chloralum is less than that of alum or sulphate of alumina, and of sulphate of iron, which are distinguished by their cheapness.

A Remedy for Catarrh.

Dr. E. BRAND (*Berlin. Klin. Wochenscrift*, No. 12, 1872) speaks in terms of recommendation of the following formula for an anticatarrhal olfactory, prescribed by Dr. HAGNER: ℞. Carbolic acid, 5 parts; rectified spirit of wine, 15 parts; strong solution of ammonia, 5 parts; distilled water, 10 parts. The mixture is kept in a stoppered dark glass bottle. When a catarrh is commencing, a few drops are placed on three or four layers of blotting or filtering paper; the patient, holding this in his hand, and closing his eyes, inhales deeply from it as long as any smell is perceptible. The effect of the treatment is to cut short the acute stage of the cold, to prevent the occurrence of subsequent coryza and bronchial and laryngeal catarrh; while all troublesome symptoms are rendered much milder. The remedy should be applied every two hours.

Medical Superstitions.

A correspondent of the *Augsburg Gazette*, writing from St. Petersburg, sends that journal some curious details regarding the means employed by the superstitious in Russia to avert the effects of cholera. One of the most curious results of the cholera, says he, has been to bring out in various localities certain revelations of Paganism.

The spread of this mysterious and terrible disease led to the supposition of a Divine chastisement, and attempts were made to seek protection from it by practices which seemed to have fallen into oblivion for centuries. It is a remarkable fact that Christians and Jews showed this leaning towards Pagan customs in an equal degree.

Ingrowing Toe Nail.

The following suggestion is made in the *British Medical Journal*, by Dr. G. STILWELL:—Forty years since, when I was an assistant, a young farmer one day came to the surgery, and was operated upon for an ingrowing toe-nail. This was done by tearing the nail away. The poor fellow suffered so severely that I was induced to say, "I will never perform that operation." Of course, in many years' active practice, I have had many such cases under my care; and my invariable mode of proceeding has been to find the edge of the nail with a probe, and then remove the whole of the granulations and hypertrophied cellular tissue on both sides, if requisite. In no case have I been disappointed, or ever had to treat the patient for a return of this grievous complaint. I fully expected that this mode of treatment was general; but my attention has been recently drawn to the case of a fine young man rendered almost a cripple, by having had both his great toe-nails torn out, leaving the overlapping skin to such an extent as to prevent healing, with the probability of return on the growing of a new nail.

CORRESPONDENCE.

Gratuitous Services to Ministers.

EDS. MED. AND SURG. REPORTER:—

Several communications have recently appeared in the REPORTER in reference to attending the families of ministers gratuitously. That is a difficult question to settle, and in fact it would be impossible to make a rule that would be applicable to all cases. The minister who attends strictly to his own business, and does not meddle with that which belongs to physicians, is entitled to encouragement from every source; and, if he is poor, the gratuitous services of physicians surely would not be out of place, or such part of them as the physician might be able to give. But, on the other hand, if a minister is a quack; deals in patent or secret remedies, or recommends them; gives certificates in favor of either quack medicines, quack doctors, or quack systems of medicine, then I do not think that such a one, though he be called a minister, is entitled to any favors at the hands of physicians.

I do not consider that a quack preacher is any better than a quack doctor; and I am in favor of treating both alike, for both are alike enemies to physicians, to the church to which they belong, and to God. The minister proper, however, who aims to honor God and benefit humanity, and who lives and labors with those objects in view, certainly merits at the hands of physicians a different treatment from one who carries his homœopathic case in his pocket, or recommends the practice, or peddles patent medicines in his rounds. One is serving God, and the other the devil; and I do not think that physicians should be bound to encourage the latter, no difference if he is called a minister.

JOHN WRIGHT, M. D.
Clinton, Illinois.

Remarks on Subinvolution of the Uterus.

EDS. MED. AND SURG. REPORTER:

I do not profess to make Gynæcology a specialty, and I stated distinctly in my article on Ulceration that I believed the use of the speculum might sometimes be abused; yet I do believe that more evil results to woman because it is not used, than by reason of its improper use, or because of its demoralizing tendency.

In this relation I wish to make some observations on the paper "On Gynæcological Treatment," which appeared in your issue of April 27th, from the pen of J. P. Chesney, of Saint Joseph, Missouri. He has given some of his observations, and I hope that I may give some of my own on the other side of the question.

He says of one of my cases, which I regarded as ulceration, the result of cervical inflammation: "Here we clearly find a case of Subinvolution of the Uterus, with all the consequences of malposition, malnutrition, etc., the whole train of phenomena being a *sequence* and not the *cause* of the general ill health of the patient," and a little further on he says, "the local lesions were not the *cause*, but the *consequence* of the indis-

position." That there was an ulceration I know, because I saw and treated it through my speculum, and the lady recovered; but whether this good end was a *propter hoc*, or simply a *post hoc* result, I cannot say. However, this much I can say: She had received a general course of treatment (consisting of tonics, stimulants, nutritious diet, etc.) from the hands of a competent physician, yet, strange to say, she never recovered until the *local lesions*, which I regarded as the *cause* of her indisposition, were repaired by *local* treatment.

There may have been a subinvolution of the womb in connection with the ulceration of the os and cervix, but if there was, then either Dr. Chesney is wrong, or Professor T. Gaillard Thomas is wrong in regard to the causes which gave rise to it. Thomas uses the following language upon the subject of subinvolution:—

"*Causes.*—The most prominent of these are the following:—

"Metritis or Endometritis,
"Uterine Congestion,
"Uterine Atony,"

and further remarks, "Inflammation of the uterine parenchyma, or mucous membrane, *whatever* be its cause, *retards* and *checks* involution, and is the most frequent *source* of subinvolution." See page 469, "Thomas, on the *Diseases of Women*."

But again, suppose it was subinvolution dependent upon ulceration, one of the effects of inflammation; then the treatment by tincture of ergot and digitalis, which the doctor regards as a "sine qua non," could not by any means apply, and can only apply in those cases which are caused by atony of the muscular fibres of the womb, and even in such, no such certainty of action can be expected from them, as that we can rely upon them as a sine qua non. Ergot is a very uncertain drug in its effects upon the unimpregnated uterus! I thought every physician knew that, and I am very sure that they will all agree with me in thinking that

"We might just as well apply caustic to the red tongue of typhoid fever, or drop a solution of nitrate of silver into the infected eye which accompanies a common catarrh, with the expectation of removing the disease," as to have given ergot and digitalis in such a case of subinvolution with such *local lesions* as an *exciting cause!*

Now, then, I fully agree with the doctor in the opinion that we should "study our cases well," and more *especially* our cases of *subinvolution*, and when it is "proper to do so, administer medicine *understandingly*," yet I do most freely confess that I cannot treat all cases of subinvolution understandingly without my *speculum*, and not always with all the light it throws upon disease.

Very respectfully,

R. L. Payne, M. D.

Lexington, N. C.

The Largest Medical Class in America.

Eds. Med. and Surg. Reporter:—

A few days since I received a circular and catalogue of Bellevue Hospital Medical College, New York city, and in the said circular was made this statement:

"The session of 1871-72 having been marked by the presence of a greater number of matriculants, and a larger graduating class than were ever assembled in the walls of any other medical college in America, if, indeed, they were exceeded by any in the world." Of the number of students in attendance, the catalogue recapitulates "407, and graduates, 130."

When I read this, my memory recalled the days when I passed from my *Alma mater*, Jefferson Medical College, Philadelphia. I possessed the records *then*, and I think I have them *still*, that the graduating class of Jefferson, in the year 1854, was the largest that ever made their *debut* to the world from any medical college in this country. The catalogue now in my possession informs me that the number of matriculants were 627. The number of graduates 270. Is there, then, to be found among the records of any other medical college in the Old World or the New, a class whose numbers can exceed the number I have here stated?

When the last lecture of the day was announced, and we caught a glimpse of Charles D. Meigs passing up the halls, we knew the amphitheatre would be crowded, for then, at that late hour, many students came from the far-famed University, to hear that man of eloquence and great wisdom. For real eloquence, and a pleasing style, Chas. D. Meigs was unsurpassed in those days. His manner, was *sui generis*. He never used manuscript. He often appeared with books under his arm, and almost never referred to their pages. Though the lecture occupied the

full hour, yet I often heard students saying, "I thought the time was only half up."

What a prolific author was Dunglison! He branched into many fields during his medical career, and what he wrote was well written. The most remarkable man and lecturer of the "grand array" of that faculty was Thomas D. Mütter. He was undoubtedly possessed of one of the rarest memories, the most distinct and rapid utterance, that could be found in a public lecturer. His mind and soul were, however, too much for his feeble body.

A few years after the time I speak of, the Civil War burst with unrelentless fury upon our country. Medical men, on both sides, contributed to swell the numbers of the vast armies, not only as surgeons, but in the "rank and file." It reminded one of what Homer says of the sons of Esculapius and Machaon: "They came with thirty ships to the siege of Troy, and were ranked among the foremost of the leaders and heroes." Idomeus, when calling on Nestor to carry the wounded Machaon from the battle-field, assures the old King that,

> "A wise physician, skilled in wounds to heal,
> Is more than armies to the public weal."

Have we not an unbroken succession of medical teachers that can be traced from the siege of Troy?

EDWARD CASS, M. D.

Dresden, Ohio.

NEWS AND MISCELLANY.

The University Hospital.

Work has been commenced in leveling and grading the lot in West Philadelphia, bounded by Thirty-fourth and Thirty-sixth and Spruce and Pine streets, on which the new University Hospital is to be erected. $200,000 has been subscribed for the hospital, besides a grant of $100,000, which was obtained from the State Legislature. The building will be complete in all the details necessary for a first-class hospital.

Yellow Fever.

The yellow fever has been brought to New York harbor by the Spanish ship-of-war Numancia.

The Board of Health are fully alive to the necessity of preventing all communication, direct, between the vessel and the shore; a task of some difficulty, as she is a man-of-war, and, as such, the claimant of privileges and immunities which a commercial vessel would never think of asking under the circumstances.

Vermont Medical Society.

The semi-annual meeting of the Vermont Medical Society was held at the Brooks House on Wednesday and Thursday, June 26 and 27. The attendance was small, the proceedings mostly of a social nature, and the discussions of a general character. Drs. Oramel Martin, of Worcester, and Howe, of Taunton, were present as delegates from the Massachusetts Society, and were cordially received. On Wednesday afternoon Dr. H. D. Holton, of Brattleboro, read a paper on the Use of the Ophthalmoscope in the Diagnosis of Disease. A paper was also read by Dr. L. C. Butler, of Essex, Secretary of the Society, on Inhalation. The Vice President, Dr. S. T. Brooks, of St. Johnsbury, who occupied the chair, delivered an address, on Wednesday evening, which was listened to with much interest. At the close all present were invited to the residence of Dr. Holton, where the remainder of the evening was spent in agreeable social intercourse.

The Convention adjourned on Thursday morning.

Pre-Historic Man.

An important communication was recently made to the French Academy of Sciences of the discovery of certain grottoes in the Department of the Marne, France, which, during those pre-historic ages when flint instruments were exclusively used, served as dwellings and burial places. These caverns are all cut out on the same plan, and are evidently of similar origin. The sides and arched ceilings bear the marks of stone hatchets. Some are divided by a partition into two chambers; several were receptacles for the dead, but others were inhabited; the latter were more comfortably arranged, and admitted of being closed with doors, as certain grooves show. The walls are provided with hooks, carved out of the solid clay; and, lastly, the entrances bear traces of a degree of polish from constant going in and out. On a wall of one of these grottoes there exists a rude bas-relief representing a hatchet provided with its handle, and a sling. This seems to have been the work of one of our pre-historical forefathers, the artist of his day.

Small-pox Statistics.

The total number of deaths by small-pox in Philadelphia, from the time the disease made its appearance in September last, up to the first of the present month, was 4393, divided between the sexes as follows: males, 2498; females, 1895. Since the first of July there has only been about one new case daily. There is every reason to believe, however, that it will again prevail in a modified form with the advent of cold weather. Being one of the diseases incidental to the winter months, our city is but seldom free of it during that portion of the year.

American Medical Association.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

WM. B. ATKINSON,
Permanent Secretary.

Medical journals please copy.

The Cholera.

The cholera is surely and even rapidly traveling from the East of Europe to the West. It has already almost reached the Russian frontier, and Berlin is growing alarmed. This is not without reason: for, owing to the negligence of the municipal authorities, some of the broad navigable watercourses of the city were a few years ago converted into open sewers. The unhealthy condition of Berlin is proved by the death-rate having increased one and a half per cent. during the last four years; and a visitation of cholera will be very severely felt in a city where drainage is so criminally neglected. A correspondent, writing from Cork, compares the sanitary system of that city to Berlin, and complains that the beautiful river should be turned into a noisome and pestilential drain. Official notice has been received in this country of the outbreak of Cholera in St. Petersburg. On July 12th there had been, since the appearance of the disease on June 22d, 565 cases, with 54 recoveries and 240 deaths. The number of cases is sufficient to demand from the authorities in this country immediate steps in supervising vessels arriving from the Baltic, and otherwise carrying out similar efficient measures which last year prevented the entrance of the disease into this country. Diarrhœa has already begun to swell the mortality in the metropolis and other towns in England, and we may expect a continued increase during August and September, if the weather continue warm.

Sanitarium in Liberia.

A liberal-minded Scotch gentleman, Thompson by name, is about to build a sanitarium in the Cameroon mountains, in Liberia, where the missionaries exhausted by fatigue and the terrible heat of the climate may recruit and prepare themselves for new labors. The mountains are situated at a great height above the level of the sea, and their atmosphere resembles in some measure that of England, but more exhilarating. The enterprise is utterly unsectarian, and the sanitarium will be open to clergymen of all denominations. In his benevolent project, to the consummation of which Mr. Thompson has devoted a large amount of money, he has been assisted by the various missions of the African coast.

Von Graefe.

At the Ophthalmological Congress in Heidelberg, last year, a committee was formed of representatives of various countries, for the purpose of taking the necessary measures for the erection of a statue of the eminent ophthalmic surgeon, Albert von Graefe, in the vicinity of the scene of his teaching in Berlin. The scheme has received the approval of the Emperor-King; and local committees have been formed, especially in Berlin, where active measures have been taken for obtaining subscriptions, in order that the work may be worthy of its object.

THE *American Farmer's Advocate*, devoted to the interests represented in the National Agricultural Congress, is one of the largest, and by far the cheapest agricultural paper in the country, and should be in the hands of every farmer. It should be remembered that the publishers offer it free with any $2 or higher priced paper in the country, and at only 50 cents advance with lower priced ones. Price—single, $1 per year; in clubs of four or more, 50 cents each. Address Advocate Publishing Company, Jackson, Tenn.

MRS. AGNES BULLOCK, living near Orangeburg, Ky., has lately cut an entire new set of teeth. She was born January 20, 1776, in Hanover county, Va., landed in Maysville when 12 years of age, and removed to Lexington; afterwards removed to Mason county in 1799, where she has resided ever since. She had one child only and seventy great-grandchildren living.

NOTES AND QUERIES.

Cardiac Sound.

A correspondent wishes more complete information than he is able to obtain from the text books, on the cause, pathological anatomy, and indications of the doubling of the second sound of the heart. We shall be glad to receive a communication from any one who has given it attention.

Ringworm.

Dr. N. J. S, of Texas.—We refer you to Dr. NAPHEY's "Modern Therapeutics." We cannot recommend a formula without knowing more of the cases.

Dr. J. E. C., of Kansas—We recommend to you Dr. HAMMOND's late work on Spiritualism.

Dr. B., of Illinois.—We shall be glad to examine the MSS. to which you allude.

Dr. R. O. L., of Miss.—The editorial articles in the last volume of the REPORTER express our views on this subject.

DEATHS.

COLEMAN.—At Latrobe, Pa., August 5th, 1872, Edwar Jenner, only son of Dr. W. C. and B. J. Coleman, aged 2 months and 14 days.

THE

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Communications.

CASE OF DOUBLE URETHRAL STRICTURE.

By G. F. Witter, M. D.,
Of Grand Rapids, Wis.

I send you a report of the following case of Urethral Stricture and Urinary Fistula, which I trust will not be without interest to your readers.

The patient, A. B. L., æt. 45, a Jew by birth, in February last was attacked with gonorrhœa, from which he continued to suffer, more or less, until March, when the urethral discharge began to assume the form of gleet. This his attending physician, Dr. Leon Foisig, had attempted to check, using, among other things, some quite active injections, but without success. In the early part of April he commenced to have strictures, both near the meatus, and at or near the bulb of the urethra. They became more and more formidable, and for a day or two before the entire suppression of urine, it was quite difficult to pass more than a few drops of urine at a time.

On the 20th of April I was summoned in haste to meet in council with Drs. L. Foisig and Webster. We found the patient suffering the most excruciating pain from the almost entire suppression of urine and from orchitis. The urethra seemed almost entirely occluded and impermeable. Drs. F. and W., having made several thorough but unsuccessful attempts to pass the catheter during the last forty-eight hours, we at once put the patient under the influence of ether, and commenced catheterization, using first No. 8, then 7, 6, 5, etc., gum elastic catheter, each being preceded by an injection of warm olive oil, but with no better success than before, owing to the evident tortuous and irregular canal which no ordinary catheter or sound could follow. Having made several fruitless attempts at this, we concluded to precede the use of the catheter with warm olive oil and ex. belladonna, by a hard rubber force syringe, thus bringing a portion of this solution in contact with a portion of the whole urinary canal, with a view to produce sufficient dilatation to admit the passage of a small catheter at least. Though we failed in securing the desirable result, yet we produced sufficient dilatation to admit of the exit of so much urine that the patient was relieved.

We directed warm fomentations of vinegar and hops to the testes, and the free use of diluent drinks, such as barley water, gum arabic, etc., together with one or more enemas of sulph. morphia, in the event of there being much pain and uneasiness.

May 21, 7 A. M. Patient passed but little urine during the night, and only by drops, notwithstanding an almost constant and painful straining. The testicles were very much swollen, and the right one was so full and distended as to require the use of the trocar. It was directed inward and upward, to about the centre of the body of the right testicle; when withdrawn it was followed by a small amount of pus. We then used the catheter again, preceded by the warm olive oil and belladonna, with no more desirable result than when last used; continued the use of warm fomentations and sulph. morphia injections.

7 P. M. Symptoms not much changed, except that there was more pain and general uneasiness. Ordered laudanum and starch enemas two or three times a day, as follows:—

℞. Tinct. opii, gtt.xl.
Starch water, f.℥viij. M.

To be used to control the pain and uneasiness experienced in and about the rectum.

22d, A. M. Having been requested to take controlling charge of the case at this time, it was determined to make a renewed effort to secure a passage into the bladder. After placing the patient in a hot hip bath and using the oil and belladonna, we again attempted the use of the No. 6 catheter; after which Nos. 4, 5 and 7 were passed to the first stricture, which dilated it somewhat, but not being able to pass the membranous portion or bulb, it became important that aid should be had soon, as the patient was growing weaker. We next resorted to the flexible silver bougie, which is not much unlike, in structure, the bullet probe, and being flexible, it adjusts itself to the tortuous condition of the canal.

We succeeded in passing it through the first stricture, but the second stricture offered great difficulty. It was in the bulbous portion, at its junction with the membranous portion of the urethra. After having passed the flexible instrument into, and following this tortuous canal in its course to the seat of the stricture, we proceeded with gentle pressure, turning the bougie in a sort of half rotary manner at the same time, till we finally passed the obstacle and entered the bladder. This gave exit to a very copious discharge of ammoniacal urine, with much relief to the patient. Effort was again made to pass the No. 5 catheter, but with no success, when three different sized catheters were also used with the same result. It is well to remark that the distorted appearance of the silver bougie served, when removed, to give a clear idea of the tortuous condition of the canal, the impression of which was left as distinctly as if a cast had been made expressly for that purpose.

This condition of things, together with the recurrence of pain, led to the apprehension that there must be an abscess forming somewhere in the vicinity of the membranous portion of the canal. This became more manifest by the extreme heat, pain and swelling, while attempting to aid catheterization by passing the finger into the rectum. It was decided to continue about the same treatment as upon the previous night and await the result.

7, P. M. General symptoms much improved, and there had just been a free exit of pus from the testicle. Used the silver bougie, followed by the catheter, with less resistance than at any time previous; ordered the same treatment as before.

23d, A. M. Symptoms generally much improved, except with the free exit of pus. There has been also a free exit of urine through the new passage of the testicle; used the bougie as before, preceded as usual by the use of olive oil and belladonna.

7, P. M. Symptoms not much changed; no trouble in urinating, however. Nearly all the urine finds its vent through the fistulous opening; passed the bougie as before, followed by No. 7 catheter, without much trouble.

24th, A. M. Symptoms improved; patient has less anorexia and less thirst. Used the catheter without the use of the bougie, attended with much pain and depression from the evident effect of the ether, which had been used at every operation up to this time with no bad results; but it became necessary to suspend its use for a time, until the patient became resuscitated. I contented myself with putting him on a nourishing diet, and the use of iron and bark, and washing out the urethra with warm water and sulph. morphia three times a day for a few days. We permitted him to pass the urine through the new opening for nearly a month with but little treatment, except the free use of diluents and enemas of starch and laudanum, more or less, according to the symptoms. This treatment was followed out and resulted in increased health, strength and vitality until the early part of June, when he began to suffer much mentally in reference to his new and unreal uterine canal, which appears to become somewhat obstructed at times with small crystals like phosphates, which cause more or less pain in their passage.

June 16. I determined to make an effort to close the fistula and cause the passage of urine through its natural channel. This I attempted by putting him under the influence of chloroform, and passing the silver bougie, after which the No. 8 catheter, thus evacuating the bladder, then filling the fistula with surgeon's lint saturated in a solu-

tion of glycerine and carbolic acid, in the proportion of each as follows:—

℞. Glycerine, f.℥j.
Carbolic acid, gtt. xxx. M.

The lint, thus saturated, was forced back to the catheter, where it was allowed to remain twenty-four hours without changing, and no urine allowed to escape except through the catheter, used three times a day for that purpose.

This course was followed, with but little variation, except when the lint was removed and the fresh lint replaced, being forced back less each time, until about the seventh day, when the lint was entirely removed, and the catheter used only once a day.

June 24.—Symptoms much improved; catheter No. 7 was passed with ease, but without the staff.

July 9.—Much pain near the rectum, and much uneasiness in urinating, but less discharge of slimy mucus. Ordered sitz bath and warm fomentations.

July 10.—Patient is suffering much pain and uneasiness; urinates with much difficulty. The bladder is very irritable and tender, and appears to be much hypertrophied. There is also much tenderness over the triangular space, with three small protuberances nearly over the region of the bulb of the urethra, which was very tender to the touch. Used the catheter No. 8, without the staff, and succeeded in entering the bladder, and opened the three swellings, each of which gives exit to a slimy mucous pulp, followed by a dribbling of urine.

July 11.—It becomes apparent that this is urethral perforation, followed by escape of urine and percolation of the perineal tissue, and the urine, instead of making only one opening by its presence and irritation, has become extravasated. Washed out each opening thoroughly with the following solution:—

℞. Carbolic acid, crystals, ℥j.
Glycerine,
Aquæ fontana, aa f.℥ss. M.

We were again obliged to resort to the use of the catheter, which we continued three times a day for one week, with a view to keep the urethra clear of obstruction, and to cause the flow of all the urine through it, thereby removing the very cause that kept these new-made sinuses in existence.

July 18.—The functions of these new-made openings have evidently vanished, there being no more passage of urine through them, and the openings appearing to be closed.

July 26.—General condition much better, yet the discharge from the urethra still continues. Used catheter only every third day, together with general supporting treatment. Directed the following:—

℞. Ol. sandalwood, f.℥j.
Fl. ext. belladonna, gtt. xl.
Fl. ext. krameria, f.℥j.
Mucil. acacia, f.℥iij.
Fiat mistura.
Dose—Teaspoonful every three hours.

The above treatment was continued; but little change noticed.

August 12.—Urine continues loaded with a sort of tenacious mucous, with now and then prismatic crystals. Discontinued use of catheter, and ordered the use of the following:—

℞. Syrup. sarsaparilla, f.℥ij.
Potas. iodidi, ʒiij.
Fiat mistura.
Dose—One teaspoonful every six hours, alternately with the emulsion, together with warm baths every other day.

This treatment was followed up till to-day, with but little change.

August 21.—General uneasiness over the bladder, and vicinity of the ureters. Ordered laudanum and starch injections three times a day, per rectum.

August 23, 8 P. M.—Upon my arrival at this time the patient was suffering extreme pain and mental anxiety, notwithstanding the free use of opiates. At this time the silver bougie was used, followed by No. 7 catheter, resulting in speedy relief to the patient.

August 27.—Patient hopeful; has but little pain or uneasiness; still there is little or no diminution in the deposits of the urine. Determined to wash out the bladder by the use of the probe syringe, with the following:—

℞. Glycerine,
Aquæ fontana, aa f.℥ss.
Carbolic acid, gtt. x. M.

Which solution is to follow the catheter, both of which we used once a week only. Other treatment was continued, about the same, with but little change in condition or treatment, up to the 21st of September.

September 21.—Patient much improved. Discontinued use of catheter, and all medi-

cal treatment except general supporting treatment.

November 18.—Patient has been in a good condition up to this time, but suffers more severe pain in the rectum, and sharp, cutting pain when attempting to micturate. The urine being of a slightly alkaline reaction, intermingled with sharp prismatic crystals, the presence of which in the urethra seems to be the source of much of the pain, the urethra having become so much irritated as to be susceptible to the slightest impression.

November 25.—Patient gaining; free passage of urine. Discontinued the use of the catheter, except once a week. Ordered suppositories, to control the pain in the rectum.

December 2.—Symptoms favorable. Used the catheter, with no obstruction. Directed him to use it himself once a week. About this time the patient determined to visit Milwaukie, where he hoped to get relief from the constant and unnatural discharge from the urethra, thereby relieving me, and taxing one of our best Milwaukie surgeons with a burden not easily forgotten. Having been absent about two months, he returned home again, with the discharge but little, if any, changed, and his general health improved.

I have thus given an outline of this case, and the treatment, leaving out many points of interest for want of time and space; and although we did not succeed in every particular in controlling the symptoms of this case, yet our expectations were more than realized in, first, overcoming and preventing further urethral obstructions; secondly, in preventing its re-establishment, by proper instruments at proper intervals; and, thirdly, in closing and keeping closed those fistulous openings, without resorting to the knife.

ORIGINAL OBSERVATIONS AND EXPERIMENTS WITH HYDRATE OF CHLORAL.

By Laurence Turnbull, M. D.,
Of Philadelphia.

This new and valuable sleep-promoter, which has been so *recently* introduced into practice, has already been employed in thousands of cases.

Chloral conforms to all the tests of Drs. Leibreich and Richardson, being solid, of a white color; taste pungent and disagreeable, like that of a stale melon and chlorine. It dissolves with some difficulty in cold water, more freely in hot water, but requiring equal parts, by weight, for a perfect solution; unaffected by nitrate of silver, and is slightly clouded by a solution of permanganate of potassa. Its physiological and therapeutical action has been tested upon frogs, men, and women.

First Experiment.—On a large frog; was administered hypodermically into the inner part of the thigh, half a grain (gr. ss.) of Hydrate of Chloral in twenty minims of distilled water (xx. m).

Nine minutes after, the frog was examined. The respiration was increased to twenty (20) a minute, but not the slightest narcotic result was perceived; skin cooler than natural. Waited thirty minutes, and again injected (gr. ss.) one-half a grain. Soon after there was a drooping of the head, relaxation of the limbs, closing of eyelids (but no alteration of pupil), followed by profound stupor. In the course of ten minutes this animal became quite rigid, in fact cataleptic, for when the limb was stretched out it retained that position. There was no tactile sensibility, not even when pricked or cut. When the web of the foot was placed under the microscope, two hours after the second injection, the blood was found of a dark-red color, in active movement. This was witnessed also by my son, Mr. (now Dr.) Charles S. Turnbull, and Mr. (now Dr.) G. B. Dixon. At this time the animal seemed almost dead, and no movements of respiration could be seen. The only motion was a feeble one of the heart, confirming Leibreich's views that the heart is the last part that dies while under the influence of hydrate of chloral.

Experiment Second.—Another frog was treated in a similar manner, with one grain (gr. j.) of hydrate of chloral in solution, but it passed rapidly into the deathlike state. The heart's action was so feeble as not to be heard.

Experiment Third.—A third frog was treated with three-quarters of a grain of hydrate of chloral, and was then carried to a meeting of the Philadelphia County Medical Society, where it was exhibited to the members present, in the apparently dead condition; and yet there was a movement of the circulation under the microscope. On removing the sternum, one hour after, the heart was found acting slowly, but soon

stopped; and on stimulating it by friction the heart would again act, as in all cold-blooded animals.

It will be seen, by the above experiments, that there are three stages of the action of chloral on animals. First, soporific; second, sedative; third, relaxant.

Second, deep sleep, with diminished sensibility, and cataleptic state, with rigidity. The third state is a sleep so profound that it looks like death; and unless revived, death supervenes.

Experiment Fourth, which demonstrates the fact that in small or moderate doses, from ʒss. to ʒ, hydrate of chloral is not an anæsthetic, but is hypnotic, or a producer of sleep. Lady, aged 45, suffering from gastric fever, with distressing nausea and vomiting, with diarrhœa, but unable to sleep for several nights, even under the influence of the camphorated and simple tincture of opium, also Dover's powders (pulv. ipec. et opii, U. S. P.), by enemata. Dissolved gr. xx. of hydrate of chloral in a wineglassful of sweetened water, which was administered at 8 P. M. There was considerable heat of skin; pulse rapid and feeble. It was taken while in the recumbent position, and no sickness or disagreeable results followed. Her stomach being empty, in half an hour she was sound asleep.

At 12 P. M. pulse quiet and slow; breathing so gentle as not to be noticed; when, feeling uneasy on account of the very quiet sleep, she was simply touched on the hand; she at once awoke, inquiring "if we wanted to wake her?" She changed her position, and again went to sleep, and slept without interruption until 8 A. M. the following morning.

Experiment Fifth.—Lady, aged 34; has had a tumor removed from the uterus, and some months after she began to suffer the most distressing pain, with swelling in the region of the right ovary. All the domestic remedies, as mustard plaster, hot fomentations, with hops, etc., had been tried in vain, also the application of opium and chloroform, but without benefit, being unable to take either morphia, opium, or any of its preparations. She was directed gr. xx. of the hydrate of chloral in water and syrup. This was taken in two doses, resulting neither in sleep nor relief of pain. She was then directed thirty grains (gr. xxx.), after taking which she had three hours of sleep, and by repeating the half-drachm doses she was entirely relieved of the pain, and was able to sleep without being disturbed by noises or touch.

In this case the hydrate of chloral did not act as an anæsthetic until fifty grains (gr. l.) had been administered.

Experiment Sixth.—Young married woman, aged 25, with typhoid fever; pregnant, and threatened with abortion at third month; pulse 100; temperature of skin 107; dry, with petechial eruption on abdomen on fourteenth day; unable to sleep; had taken at various times Dover's powder, bromide of potassium, tincture of opium, morphia, etc., but with very unfavorable effects. Directed the hydrate of chloral in water and syrup of orange flowers. The first night she took twenty grains (gr. xx.), but it was rejected by the stomach; still she slept for a short period; second night she had ten grains (gr. x.); still rejected; third night, five grains (gr. v.), and slept longer than any night since she has had the fever; less fever; heat of skin reduced to 93°, and pulse 90.

On the fourth night she aborted, and fœtus was discharged, softened; lost considerable blood; placenta retained. The os was plugged, and in the morning removed the plug; but the placenta did not all come away for several days; convalescent at the end of the sixth week. The hydrate of chloral was employed from the 10th of February until the 16th of March. There is no doubt that it hastened the recovery very materially, by reducing the temperature of the skin, allaying pain and nervous excitement, which kept up the fever. The point of importance that these cases teach is that small doses are to be employed with persons of feeble constitution, or where there has been loss of blood. It also proves that it reduces the temperature of the skin; this fact we have since proven in numerous cases.

Experiment Seventh.—A comparison between the effects of morphia and hydrate of chloral. Mrs. N., aged 34; has suffered with paroxysm of intense pain in the hypochondriac region, with obstruction of the bowels, followed by inflammation of a diphtheritic character, evidenced by cast being discharged. The only means of relief was by the use, hypodermically, of from half a grain (½ gr.) to three-quarters of a grain (¾ gr.) of morphia, which, although it gave her almost instant relief, was invariably followed by much distress in her

head, with nausea and vomiting. By the use of seventy grains of hydrate of chloral she was relieved of her pain, and slept; and the most agreeable feature about the effect was that she awoke from her slumbers without any of the unpleasant symptoms in the head and stomach.

Experiment Eighth.—Mrs. R. M., aged 30, suffering in like manner, was relieved by sixty grains (so that 60 to 70 grains of chloral are about equal to half a grain of sulphate of morphia.)

Experiment Ninth.—Cases of gout and rheumatism are better treated by adding soda or potassa in conjunction with chloral, or the bromide of potassium. Samuel H., aged 54, was exposed to a sudden change of temperature of twenty degrees reduction, without being suitably clad, and was attacked with acute rheumatism of the limb and knee; he was directed an anodyne and a stimulating liniment with Dover's powders (pulv. ipecac. et opii, ℈j.) gr. xx, but without relief. A mixture was then ordered him of aromatic water and syrup, of fifteen grains of potassæ bicarb., and thirty grains of hydrate of chloral; he took but five doses, when he was free from nervous excitement and pain, and finally slept. By its occasional use he had no return of the disease.

Experiment Tenth.—John H. B., aged 45, while suffering with acute gout in his hands and hip, was ordered three ten grain doses in water and syrup of chloral, but as it caused him so much excitement, the soda bicarb. was ordered with it to get rid of the soda salts in his joints. This had the desired effect, and by its use for ten nights all his acute symptoms disappeared; only a certain amount of stiffness remained.

Experiment Eleventh.—Men require, as a general rule, larger doses than women, and in brain difficulties bromide of sodium is an admirable addition.

John H. N., aged 56, suffering from amaurosis from atropy of the optic nerve. Was exposed to cold, and contracted bronchitis, which passed along the eustachian tube to the middle ear, causing otitis media, followed by intense pain. He was ordered thirty grains of hydrate of chloral, without relief; a second dose of the same quantity, with a drachm of bromide of sodium; this relieved the pain, and gave him a quiet, good night, and he awoke with a slight discharge from the ear, but free from pain.

Experiment Twelfth.—Its value in diseases in little children.—We have tested in three typical cases during the heat of the summer of 1871, little children suffering from restlessness and cholera infantum. In almost every instance the child was able to sleep without pain or disturbance of the brain, by the soothing hypnotic influence. The chloral was combined with an aromatic syrup; also chalk, and a small portion of port wine or syrup of brandy (made by burning the strong brandy) with sugar. Our dose was, for a child of 12 months, one grain of hydrate of chloral, half grain of prepared chalk and half grain of powdered gum arabic in each tablespoonful; also, some mint, aniseed, or cinnamon water, so as to disguise the disagreeable taste. The hydrate of chloral should be increased in the proportion of one grain for each year.

(To be Continued.)

NOTES ON A CASE OF ECLAMPSIA.

By Wm. C. Crooks, M. D.,
Of Philadelphia.

The following case is given for what it may be worth statistically, it being the second case coming under the writer's immediate observation, in both of which the premonitions were well marked, though the duration of the precursory phenomena in one case was but three or four hours; in the other, full twenty-four hours' warning was given; but the family, ignorant of the approaching danger, gave no alarm until a few hours before the invasion.

Mrs. H., æt. 16, a primipara—near full term—robust, and of vigorous constitution, was, on January 15th, 1872, placed under my professional care. For several hours prior to my visit the patient had suffered from a general malaise; was excitable and irritable. Succeeding this, difficult respiration; insensibility of the sense of touch; disturbed vision, and a poignant pain over left temple. When first seen, 5 P. M., these symptoms had acquired a degree of great intensity; a half hour later the patient passed into a comatose condition; could with much difficulty be aroused; replied to questions incoherently; pulse full, slow and hard; skin hot and dry; animated expression of face; bowels constipated; the bladder contracted and empty. At 6 P. M. the first well defined convulsion was produced. Between that hour and 8 P. M. four others were ushered in with increased intensity at each

recurrence. After that hour the patient remained continuously and entirely insensible. Spasms severe, frequent, and remittent; os rigid, and neck obliterated.

The most decided treatment was demanded—as the nature of the case will suggest—from the first moment the case was seen. An active purgative enema was at once given; 2 grs. calomel and 1-16 grain sulphate atropia given by mouth every half hour to facilitate the action of the bowels and assist in dilating the os; ice to head; cold aspersions upon the face and chest; local blood-letting by means of leeches applied behind the ears and to the mastoid processes. Extracted 20 oz. first application; reapplied in half an hour, and extracted 14 oz. more; administered chloroform by inhalation, to the amount of 8 oz., between the hours of 8 P. M. and 4 A. M., without producing any appreciable effect, or sensibly lessening the severity of the almost constant convulsive throes. By this time the os had become sufficiently dilated to allow the head of the child to pass into the pelvis—presentation, third position of vertex; though the eclamptic convulsions continued unabated, the uterus became passive, making it necessary to deliver the child with forceps. This was quickly and easily effected by my able and skilled friend, Dr. Wm. B. Atkinson, who had been called in to assist in the case. It may be noted here, that to overcome the violence of the convulsions and control the movements of the mother during delivery, we tried a mixture of ether and chloroform, which acted very satisfactorily; the chloroform alone having failed to produce the desired effect.

The child delivered, the mother remained, under the influence of the anæsthetic, in quietude—with the exception of an occasional twitching—until 8 A. M., 16th January, when the bowels were moved, immediately returning into the same comatose condition, in which she remained until 12 M., when a general convulsion ensued, followed by a free evacuation of the bowels. Gave 20 grs. chloral hydrate, which in a few minutes produced sleep. 3 P. M., breathing more natural, respiration free. 10 P. M., still sleeping, breathing improved.

17th. Awoke once or twice during night, rolled about the bed, restive, incoherent muttering. No return of spasm.

18th. Much improved. Continued chloral hydrate in 5 gr. doses, 3 times daily, directing that it be given oftener if required.

19th. Considered out of danger. Tonics and a good regimen ordered.

22d. Doing well. No change in medicine or diet.

30th. Entirely recovered; condition excellent. Discharged.

N. B. Child had a well-marked convulsion six hours after birth; no recurrence. Mother and child both doing well at this date, August 23, 1872.

Editorial Department.

Periscope.

The Expectant versus The Mercurial Treatment of Sypnilis.

The New York *Medical Journal* has a translation of an article by Dr. A. Fournier, of Paris, from which we extract the following:—

In the first place, what do we daily observe upon syphilitic patients who are treated carefully, strictly, and perseveringly? What lesions do they present? How does syphilis show itself upon them?

Syphilis with them is a very slight affair, and I certainly do not exaggerate in stating, after a careful perusal of my notes, that in ninety-five times out of a hundred *at the least*, if it is treated, it is really mild. Almost all the patients who take good care of themselves run through their syphilis with very little damage to themselves, and only present a small number of manifestations of no gravity, such as non-ulcerating and superficial cutaneous syphilides of the skin, roseolar and papular; syphilides of the mucous membrane showing themselves from time to time in consequence of local irritation (as, for instance, in smoking), adenopathies, a few fugitive pains, temporary thinning of the hair, and other similar slight manifestations. A vast number of my patients have been rid of syphilis at this price, as I have observed years after their infection. I can count by thousands those whom I have seen thus spared by the diathesis in consequence of a

treatment properly followed, and there are other physicians who have observed the same in a number of their cases.

The serious and grave accidents of syphilis are very rare in patients who have been treated, and do not occur oftener than five times in a hundred. This is the reason why we see such a difference between cases of syphilis in private practice and those observed in hospitals. Syphilis in hospitals is frightful and disgusting, and the lesions which cause the patients to enter them are hideous and shocking, and often more or less serious. Syphilis of private practice has other features, and shows itself under a much milder aspect. Never do you see, for example, in these cases, those enormous condylomata which you so often see here, which cover the vulva and anus. With the exception of some few cases, you will never see syphilis assume such a wonderful multiplicity of forms and of phenomena as you so frequently see in hospitals. What is the reason of this difference? It is this: that private patients, at the first sight of their disease, consult a physician, for they are intelligent, and understand the necessity of being treated, and *are treated*. Others of them are treated in a desultory manner, just sufficient to merely attenuate the lesions of the diathesis; while, on the contrary, the men and women who frequent the wards of a hospital do not take care of themselves, and only seek our advice at the last moment. They allow the disease to fix itself firmly upon them, and they end by developing the grave form of lesions, which are the combined result of the disease, of negligence, of misery, and of the absolute want of hygiene and treatment.

Having shown the course of a case of syphilis which has been treated, let us examine the course of a case which is left to its natural evolution. Syphilis becomes serious and formidable, especially when it is not treated. It then *multiplies its blows;* it breaks out in lesions of every class and gravity, occupying the whole body; it causes incurable infirmities, and even compromises life. What we see developed in the secondary period, under these sad conditions, are syphilides of every variety, ulcerating and non-ulcerating; syphilides of the mucous membranes; multiple adenopathies, which under these circumstances sometimes degenerate into buboes which we call strumous; alopecias which render the scalp bald, and sometimes this loss of hair is general throughout the body; pains of every variety, horrible headaches, neuralgias, periostitis, myalgias, and arthralgias; iritis, choroiditis, retinitis, liable to impair vision forever, or to destroy it; sarcocele which may result in atrophy of the testes; nervous affections of various kinds; gastric, intestinal, and nutritive disturbances which may predispose to true cachexia; later, in what we call the tertiary period, we find more destructive syphilides, pustulo-crustaceous, serpiginous, and phagedenic, gummy tumors, followed by ulceration and destruction of organs; exostoses, caries, and necrosis; lesions of the brain and spinal cord, producing hemiplegias, paraplegias, and disturbances of intellect: all of these phenomena producing incurable infirmities, when they do not cause death; visceral lesions of every site, and having an alarming prognosis, not to speak of abortion, miscarriage, and the grave and so often fatal forms of hereditary syphilis.

Is not this contrast between the disastrous results of an expectant treatment, and the usually mild character of a syphilis which is treated, very striking? Still, we too often have the opportunity, here, of drawing such a contrast. Too often do we find poor patients in a very desperate condition, in consequence of their having been treated on the expectant plan. I do not exaggerate when I say that the consequences of this course are *disastrous*—disastrous is the only word with which I can qualify them. A few observations, taken at random from my notebook, are convincing upon this subject:

Here is a young woman who contracted syphilis when eighteen, and she was not treated. At the age of twenty-six she had a gummy tumor of the velum, and she was not treated then. In consequence, her velum was destroyed, and you now see her with a double infirmity; a nasal twang of the voice, which has become indistinct, almost unintelligible; and regurgitation through the nose of solid and liquid food.

This other woman contracted syphilis from her husband seven years ago. He, wishing to hide his fault, did not have her treated, believing it would amount to nothing. At first some lesions appeared, which were trifling; then, a few months ago, this horrible, ulcerating, tubercular syphilide appeared, which will leave deep scars, and will disfigure this once pretty woman.

The third example is that of a young actor, who contracted syphilis two years ago. Under the advice of a physician, he was not treated. Then many troubles of a serious nature came on, among which was a hemiplegia, evidently due to syphilis. He is left feeble, and paralyzed in the right hand, at twenty years of age, and he almost wishes for death.

The fourth case, which was recently in our wards, contracted syphilis three years ago, and was assiduously treated by homœopathy, which means that she was not treated. She had syphilides of the skin and mucous membranes, and pains of every sort, periostitis, and other lesions; still she adhered to homœopathy. Finally she developed a double irido choroiditis, and a gummy tumor of the velum. Her palate was entirely destroyed, one of her eyes has undergone atrophy, and the other has been only slightly improved by a specific treatment instituted too late.

The last example which I will cite, though I have many more, is that of a child of a very respectable family, which was inoculated with syphilis in catheterization of the Eustachian tube. At first the disease was not recognized, and its gravity was not ap-

preciated, and a syphilitic treatment, which was ordered by one of my colleagues, was only pursued for a few weeks. Five years later, a gummy tumor of the velum, and necrosis of the ossa nasi were developed, and the child lost her velum, and her nose is destroyed and flattened. Such are the features of cases of syphilis not treated. Now, this parallel, it seems to me, furnishes a peremptory answer to the problem under consideration. If such is the effect of mercury upon the diathesis in preventing and in modifying either a part or all of its manifestations, if it acts as a safeguard for the future, while it cures for the present, is it not possible to believe that it has a general influence upon the diseases? It would seem remarkable that mercury, which can change a diathesis so fertile in lesions to an affection attended with a group of lesions comparatively mild, which has the power of attenuating, and of rendering the diathesis mild, and of at least controlling its ulterior evolution, could produce such results without acting upon the disease itself.

We are warranted, then, in concluding that mercury not only cures the lesions, but that it attacks their cause, and, in short, exerts a general curative influence on the disease.

These opinions are, if I may say so, my profession of faith. Studying syphilis for years, I have *learned to fear it*, and, as a consequence, I make it my duty to treat it, and I enforce its treatment. I condemn the expectant treatment, and I cannot speak too severely of it, and I say with conviction that a physician who, having in his mind such cases as I have described, would submit his patients to the natural evolution of the disease, when he has at hand so powerful a remedy as mercury, this physician incurs one of the gravest of moral responsibilities. I do not prescribe mercury in a routine manner, or according to tradition, but according to my own personal experience, and my conviction from clinical study. I give it to ameliorate the present symptoms, at the same time in *anticipation of the future*. It is not the present or the immediate future of a patient that I fear; it is his remote future, six, ten, twenty, and thirty years hence. In giving mercury, I endeavor to save my patients from late visceral lesions, and the object I aim at is to render the diathesis mild at present, in order to shield the patients from danger in the future.

The Hypodermic Use of Morphia and Arsenic in Asiatic Cholera.

The following remarks, made before the Cincinnati Academy of Medicine by Dr. CUNDELL-JULER, Cincinnati, O., are quoted from the Cincinnati *Lancet and Observer*:—

Owing to the success attending the hypodermic injection of morphia, by medical men in Europe, in cases of cholera, requiring but one or two injections, of from one-quarter to one-half a grain, to subdue cramp and vomiting, restore the pulse, and re-establish warmth as well as moistness to the skin, even in those most unpromising cases recorded by Dr. John Patterson, of Constantinople, in the *Medical Times and Gazette*, of January 27, 1872, there can be no question that, in the event of a visitation of the cholera epidemic in this country during the present year, this mode of treatment will be very generally resorted to. In anticipation of this calamity, which may be hurried upon us *sans ceremonie*, at any moment, by some infected ship disembarking her cosmopolitan crew upon our shores, I desire to direct the attention of the profession to the remarks upon this subject made by Dr. J. J. Temple, of Covington, Ky., which may be found in Vol. IX. p. 555, of the *Cincinnati Lancet*, for 1866. He having been the first in this country to suggest the use of the hypodermic injection of morphia in cholera, not being aware of the thought having been before suggested, says: "I have the honor to offer, as a suggestion to medical men, the propriety of using hypodermic injections over the epigastric region, of salts of morphia, in such quantity as will most readily and with safety act during the time of violent vomiting and cramps, in Asiatic cholera. This mode of using the remedies, I think, should be attended with favorable results, as it is not immediately expelled the system after its introduction, but remains long enough to make its impression upon, and give its support to the nervous system, through the dreaded contest which is to result in the life or death of the patient." "The salts of morphia," he says, in another part of his paper, "in their several varieties, are, in my opinion, by far the most important. Other remedies, such as strychnine, hemp, and quinine, may be useful as assistants, or even as principals, but morphia I regard as standing paramount in the list." All that has since been written upon the subject of treatment in cholera illustrates the value of Dr. Temple's suggestion, as well as the soundness of his views. There is no doubt that opium, conveyed into the body in one form or another, has always been the chief remedy upon which most medical men have mainly depended in their treatment of cholera; although, in the eager desire to save life, the pardonable use of many absurd remedies and much unnecessary handling of the patient have been resorted to. Almost every known drug in the pharmacopœia has been given, while the most diversified applications have been applied to the body.

Therefore, the true indication in cholera epidemics is, to isolate cholera patients, to prevent the development of the supposed cause of cholera in the dejections, by the early application of disinfectants or fire to the same, to cure the premonitory diarrhœa by chalk, opium, and astringents. But when this simple cholera diarrhœa is suddenly transformed, sometimes in a marvelously brief period, to cholerine, the walls of the stomach becoming irregular and spas-

modic in their action, while the limbs are seized with cramps, showing the want of nourishment, and lost power in the nervous centers, then Dr. Temple's suggestion becomes invaluable, as the morphia "is not immediately expelled the system after its introduction, but remains long enough to make its impression upon and give its support to the nervous system, through the dreaded contest which is to result in the life or death of the patient." In cholerine, it is not so much our object to check the diarrhœa, as it is to protect the nervous system from any undue waste of force, carrying the patient safely through a crisis while that nervous force is being equally distributed, by the sedative action upon the nerves of a hypodermic injection of a watery solution of one-twentieth of a grain of arsenious acid twice in twenty-four hours, relieving the immediate symptoms with morphia in the manner suggested by Dr. Temple. There are cases recorded of cholera being cured by the sedative action of arsenic alone. Should, however, external means be deemed necessary to prevent the driving of the blood to the capillaries of the bowels, to the draining away of nearly a fifth of the person's weight per anum, by the spasmodic contraction of the blood-vessels going to the periphery, then the patient might be seated in a chair over a saucer of ignited whisky, the whole enveloped in blankets, till energetic diaphoresis has taken place, keeping the patient in bed between blankets, providing the bowels are more quiescent, till he has had a formed stool. Thus we may save him from passing into the ultimate stages of the disease, where we have paralysis of the nerves presiding over the functions of organic life, or an attempt at reaction in cholera typhoid, in which case the patient is usually carried off by the sequela that follow cholera asphyxia. Dr. Chapman made use of the ice-bag in the treatment of cholera at Southampton, but I learned in conversation with friends in New York that his treatment was very unsuccessful.

New Operation of Thoracic Paracentesis.

Br. T. J. MACLAGAN writes to the *British Medical Journal*:—

Mr. Lister, and those who have adopted his views and treatment, have shown us how incisions may be made into joints, and how psoas and lumbar abscesses may be opened without any of those dreadful consequences which, prior to the adoption of his mode of treatment, used frequently to follow such surgical interference. Why not apply the same practice to the treatment of empyema and hydrothorax? If the entrance of air be an evil to be avoided, why not guard against it by creating an artificial atmosphere around the wound by means of a spray-producer, so that if anything enter the pleural cavity from without it will not be air, but whatever the operator chooses to put in the spray-producer? And furthermore, if we wish to guard against such an accident during the subsequent progress of the case, why not adopt the same means which are found efficacious in lumbar and psoas abscess, and dress the wound in the same way as surgeons do an opening into such an abscess? I see no reason why we should not do all this, and no reason why we should not expect good results from its adoption. Had I the opportunity, I should certainly put this plan into practice. In performing the operation I should discard the trocar and canula altogether, and simply make an incision with a bistoury. As one does not often have an empyema or hydrothorax to treat in private practice, I have ventured to suggest this mode of treatment to those who may have such cases to deal with.

In performing the operation, I would simply carry out Mr. Lister's instructions for opening a psoas abscess. A filtered solution of carbolic acid, of the strength of 1 in 100, should be put in the spray-producer, and the spray kept playing around the part at which the opening is to be made. The usual precaution should be taken of first inserting a grooved needle or small trocar and canula, previously dipped in carbolized oil (1 of carbolic acid to 7 of olive oil.) The surgeon being satisfied as to the proper part for the incision, a free opening should at once be made into the pleural cavity by means of an ordinary bistoury, also previously dipped in the carbolized oil. The spray, of course, must be kept constantly playing over and around the wound, not only during all this time, but also while the fluid is running away, and must be continued till the dressing is applied. The best dressing is Lister's antiseptic gauze. A strip of this should be cut and folded so as to form a square of six or eight inches; eight, twelve, or sixteen layers may be used, according to the amount of anticipated discharge; this should be applied over the wound as soon as the fluid is all away; until it is applied there should be no intermission in the play of the spray around the wound. If it be considered desirable to wipe the side before applying the dressing, this should be done with a cloth dipped in a solution of carbolic acid twice the strength of that used for the spray. A piece of some waterproof material should be applied over the gauze, and the whole fastened round the chest. The dressing should be changed on the following day, and afterwards every second, third, or fourth day, according to the amount of discharge. If it be desired to keep the wound open, this may be done by inserting a bit of the antiseptic gauze between its edges. The spray must always be kept playing on and around the wound while the dressing is being changed.

The chief advantages of the above mode of treatment are (1) that the withdrawal of the fluid is effected more speedily and efficaciously than by any other mode; (2) that there is no trouble, either to physician or patient, with drainage-tubes or other inconvenience; (3) that the entrance of air, with

whatever germs or other ingredients it may happen to contain, is efficiently guarded against; and (4) that the patient need not be confined to bed, but may even take open-air exercise before the wound is closed (if his general state permit it) without interfering with the efficacy of the treatment. In some cases this last recommendation is one of great importance.

To one other point I would refer before concluding. The existence of tubercle in the lung is regarded by some as a reason for not having recourse to paracentesis in cases of effusion. I am of those who take a diametrically opposite view, and see in the presence of tubercular mischief only a reason for avoiding unnecessary delay. The chance of ultimate recovery in such cases is, of course, very much less than it is in cases in which the lung-tissue is sound. But the chance of improvement in the tubercular case becomes less and less the longer the fluid (which is generally purulent or serо-purulent) is allowed to remain in the chest, irritating an already damaged lung, and further undermining an already impaired state of the general health. In such cases we should tap early. The mode of performing the operation which I have recommended appears to me particularly applicable to these tubercular cases.

The exclusion of air in Dr. Bowditch's operation is, of course, as complete as may be; but there are many cases in which it is impossible for the lung to expand freely at once, and in which the fluid cannot be all drawn off unless its place is supplied by something else. Nature abhors a vacuum, and the place which was occupied by the fluid must, to permit its full evacuation, be taken by the lung, by air, or by an artificial atmosphere; the first is the best, but is not always attainable; the second is the worst, and is to be avoided if possible; there remains only the third, which may be formed of anything capable of being converted into spray. I have suggested Mr. Lister's carbolic solution as probably the best. I believe, too, that this mode of operation and after-treatment will be found to remove the necessity for drainage-tubes in cases of empyema. Should the fluid be fœtid, I should not hesitate to inject a solution of carbolic acid of the strength of 1 in 50. To exercise its full protective influence, the spray should be fine enough and dense enough to thoroughly replace the air all round the wound.

On the Corpora Striata.

At a late meeting of the Medico-Chirurgical Society of Edinburgh, Dr. McKENDRICK read a paper on the corpora striata, with the results of experiments. After a few preliminary remarks regarding the vague character of our knowledge of the functions of the different portions of the encephalon, and having pointed out some of the difficulties in the way of attaining trustworthy results by experiment, Dr. McKendrick described the general anatomy and histological structure of the corpora striata, including their connections with the crura cerebri. He found in these organs in pigeons, that the upper surface was essentially molecular. Deeper down, about half-way through the thickness of the bodies, there were numerous pyramidal nerve-cells, similar to those found in the convolutions of the cerebrum, while at the deepest part the cells were less numerous, and resembled the smaller multipolar nerve-cells of the spinal cord. The nerve-tubes increased in breadth as one proceeded from the surface to the base. He described the development of the corpora striata, pointing out their early appearance in the embryo as thickening in a floor of prolongation or diverticulum from the anterior cerebral vesicle, the cavity remaining as the lateral ventricle. He discussed briefly the comparative anatomy of the organs, tracing them from the lower to the higher orders of vertebrata, showing their persistence from the amphioxus upwards. He alluded to the views held by several comparative anatomists, that the cerebral lobes of fishes might really be regarded as corpora striata alone. The brains of the reptile and of the bird were also described; and it was shown that in both, particularly in the latter, the great mass of the hemispheres really consisted of corpora striata, the cerebrum proper being represented by only a thin layer of grey matter over the ventricular cavity. He then described the results of thirty (as representing a much larger number of birds) experiments on pigeons, as follows:—1. After removal or injury of the cerebral hemispheres alone, or along with the corpora striata, there was a persistent diminution of animal heat to the extent in pigeons of 6 deg. to 8 deg. Fahr. 2. Removal of one of the cerebral hemispheres from a pigeon had no permanent effect. 3. Removal of the anterior half of both cerebral hemispheres, without injuring the corpora striata, was negative in results. 4. Removal of the posterior half of both cerebral hemispheres occasioned no marked effect, except that the birds took no food, and required to be stuffed. 5. Careful removal of the thin layer of grey matter representing the cerebral hemispheres in pigeons was followed by a diminution of intelligence, volition, and sensation. 6. Removal of the hemispheres along with the upper half of the corpora striata, caused complete loss of intelligence, volition, and sensation. 7. Injury done to the deeper portions of the corpora striata was followed by severe convulsions, and afterwards by paralysis of both extremities, and was always soon fatal. 8. When one hemisphere, together with the upper part of the corresponding corpus striatum, was removed, there was loss of vision on the opposite side; but removal of the hemisphere alone was not followed by this effect. 9. Injuries inflicted on the corpora striata by passing a narrow double-edged knife through the side of the head were negative, unless the deeper parts of these bodies were involved. 10. Removal of the cerebral hemispheres alone,

without injury of the corpora striata, was not followed by complete loss of hearing or sight, but if the upper part of the corpora striata were removed, these senses were abolished. 11. Injury to these parts of the brain was followed by fatty change in the muscles of the bird, if it survived a month or two after the operation. 12. The corpora striata have a twofold function: the lower or deeper part being concerned in motion, the upper part being probably the instrument of crude sensations, sensations followed by no ideas or attendant images.

Climatology of Kansas.

Dr. T. SINKS gives the following description of Kansas in the Leavenworth *Medical Herald*:—

The State of Kansas lies between 37° and 40° north latitude, and between 94° 30′ and 102° west longitude. The eastern border is elevated 900 feet above the level of the sea, and gradually ascends toward the west at the rate of about three feet per mile. The surface is that of gently undulating prairie, interspersed with numerous streams, the margins of which are skirted by timber. The general direction of the principal streams is from west to east. There is an entire absence of lakes, swamps, and marshes, and the streams seldom overflow the alluvial bottoms along their course. The natural drainage of the State is most excellent, the descent of the beds of the streams being sufficiently great to produce rapid currents.

The measure of moisture precipitated in rain and snow for the year averages 31 inches at the eastern border of the State, and 24 inches at the western border, gradually decreasing toward the west.

Observations at Fort Leavenworth for 35 years give the following averages for the seasons: Spring months, 7½ inches; summer, 13; autumn, 7½; and winter, 3½ inches. The precipitation of rain for the month of March shows a small increase over that for either of the winter months. The quantities are doubled in April and again doubled in May, the mean maximum occurring in June and the minimum in January. The geographical position of the State, its proximity to the plains, its exposure to the cold currents from the Rocky Mountains and the warm ones from the Gulf of Mexico, the conflict of these with the great normal west wind of the temperate latitudes, all combine to produce confusion from which it is almost impossible to eliminate anything that may be called general. However, the prevailing winds in the summer are from the southwest, south, and southeast; in the winter from the northwest, north, and northeast, in the order of frequency as enumerated. During the spring and autumn these points are about equally represented. Direct east or west winds, except of a fitful character, are quite infrequent. The average force of the winds is greater than that for the Central States east of the Mississippi, and they are also more constant. The annual mean temperature at Leavenworth is 52°, at St. Louis 54°, at Cincinnati 53°, at Pittsburg 51°. There is also quite as close a resemblance in the monthly mean temperature at these points, showing, as before remarked, that the isothermal lines pretty closely correspond with the lines of latitude.

From the foregoing the natural inference would be that the prevailing diseases in Kansas were similar to those of the States lying east of us, and between the same parallels of latitude. In a general sense this is true, but the general drainage of the country, the porosity of the soil, the purity of the atmosphere, and the fact that the winters are quite dry in comparison, all contribute to reduce in amount and virulence all the malarial disorders, and in the winter particularly, inflammatory diseases, notable among which may be mentioned pneumonia and rheumatism. Adopting the nomenclature heretofore mentioned, the climate of Kansas would, we think, be very appropriately termed a bracing one, and without exaggeration a very healthy one for this latitude.

The foregoing is merely a brief review of the salient points of the subject under consideration, but it is perhaps as full as would be advisable under the circumstances. While the earth continues to revolve, the sun to shine, the winds to blow, the rains to descend, and the seasons to come and go in their regular succession, we must have ever present with us the instruments for our own destruction; much may be done, however, to blunt their keen edges, and to ward them from our vitals. Climate we cannot hope to change, but it is within the compass of human ability to obtain a knowledge of its varieties, of the diseases peculiar to each, and also to modify, to a certain degree, the baleful influence of some varieties as well as to avail itself of the benign influence of others.

Dislocation of the Metacarpus.

The following case is reported in the New York *Medical Journal*, by Dr. MASON:—

J. B., Irish, aged thirty-five, sailor, applied for treatment at the out-door department of the Long Island College Hospital, on the 15th of June last, at 2 P. M. He gave the following history: About 6 P. M. the day previous, while working on a dredging machine, he attempted to disengage a rope which had become kinked in passing over a "winch," turned by steam-power; while in the act of so doing, his hand was caught by the rope and forcibly flexed upon the wrist, and at the same time the ulnar side was twisted inward. The engine was promptly stopped, and, on freeing his hand, he discovered that his fingers were severely lacerated, and that he had "started a bone on the back of his hand." On examination, a distinct bony elevation was observed on the back of the hand, in a situation corresponding to the carpo-metacarpal joint of the fifth metacarpal bone. It was exceedingly tender when pressed upon. Careful examina-

tion eliminated fracture of metacarpal bone at this point, also displacement of any carpal bone. There was very slight œdema at the seat of injury, so that the sharp edge of the articular surface of the proximal end of the metacarpal bone could be readily traced through the skin.

Forcible flexion of the metacarpal bone increased the deformity. Firm pressure, directly downward, did not tend in any way to lessen it.

A diagnosis of dislocation backward of the proximal end of the fifth metacarpal bone was thus made out.

This diagnosis was confirmed by Dr. R. Hesse, Dr. Charles P. Donelson, and several members of the graduating class then present.

The patient was now anæsthetized, and reduction easily effected by fixing the thumbs firmly against the articulating surface, and pressing steadily forward, at the same time extension being made at the distal extremity of the bone.

The first effort proved successful, the bone sliding readily into place with a dull sound, and a sensation not unlike that which accompanies the breaking down of a simple ganglion by forcible pressure with the thumbs.

After reduction, a compress and roller-bandage were applied. At the end of three days these were removed, the patient expressing himself as feeling easier than he did before reduction.

Morphia and Atropia.

At a recent meeting of the Medical Society of the Dublin College of Physicians, Dr. J. M. FINNY read a paper on a case illustrating the general physiological antagonism between atropia and morphia. The patient, a lady of nervous temperament, aged 25, was subject to neuralgia; and for this affection Dr. Finny had, on previous occasions, used a combination of atropia and morphia, with both anodyne and curative effects. When he was consulted by this lady, in October, 1871, he determined, as usual, to administer the drugs at the patient's ordinary hour of repose. Instead of the usual dose of one-fiftieth of a grain of sulphate of atropia, at least double that quantity was injected hypodermically, in combination with a fourth of a grain of acetate of morphia. In about twenty minutes Dr. Finny found the patient complaining of great cold, with the tongue dried, parched, and rough; dryness of the throat; speech thick and inarticulate; dimness of vision; scintillation; the pupils much dilated; pulse small and rapid, 130; respirations shallow, 32. Ten minutes afterwards these symptoms had increased; there were great uneasiness and tossing about; delirium had also set in; the patient was grasping at imaginary objects in the air. Dr. Finny now resolved on using morphia as an antidote. With much difficulty, owing to the patient's perturbed state, he injected one-third of a grain of the acetate. In less than five minutes the restlessness and jactitation ceased, the skin became warm, respiration fell to 20, and the pulse came down below 100, and was fuller. In ten minutes from the time of the injection deep sleep had set in, and this continued through the night. Next day the lady had quite recovered, except for the still existent dilation of the pupils. The author then detailed the opinions of Dr. John Harley, Mr. Benjamin Bell, and others, on the subject of the antagonism between atropia and morphia, and of the toxical doses and effects of the former. Dr. Mac Swiney said that at 3.30 P. M., on the 14th of last February, thirty minims of liquor atropiæ had been given to a man, aged 40, in mistake for the same quantity of Battley's solution of opium. At 4 P. M. an emetic which had been administered acted, and stimulant treatment was commenced. At 7 P. M. the man was quite insensible, anæsthetic, with eyes open and pupils enormously dilated; pulse very rapid and small; respiration slow; surface cold, and bathed in clammy perspiration. Thirty minims of liquor morphiæ hydrochloratis were now given, and the dose was repeated until three drachms in all of the solution had been taken. Consciousness returned at midnight, when the patient complained that he could not see. He recovered perfectly. Dr. Hayden reported a case of poisoning by belladonna berries in a boy. The leading symptoms were vomiting, unmeaning laughter, and strange staggering gait. Dover's powder was given, and the patient recovered; but the pupils did not resume their normal appearance for two or three days. Dr. Hawtrey Benson, in November, 1869, treated a child, aged 4, for toxical symptoms, consequent on eating belladonna berries. The little patient was quite insensible, with jactitation and floccitatio. The face was flushed, the pupils were dilated, and dysphagia and thirst were present. Control over the bladder, also, was lost. The treatment was by tincture of opium given in three-minim doses every second hour. This child completely recovered, having taken fifty-four minims of laudanum within thirty-six hours.

On Skin-Grafting.

Dr. BUCHANAN says, in the *British Medical Journal*:—Skin-grafting has been used in the treatment of large ulcers in his wards, and generally with success. To insure a favorable result, it is necessary that the surface of the ulcer be covered with clean granulation, not yielding a copious discharge. The plan which he adopts is as follows. When the graft is to be taken from the skin of a live member, he always takes it from the person who has the ulcer; he does not consider it proper to solicit permission to take it from any one else. The skin is pinched up with a pair of dissecting forceps, and with curved scissors a piece half an inch long and about one-eighth of an inch broad, is cut off to the depth of the true skin. This is cut into three or four pieces, and they are

at once placed on the ulcer, the granulation having been previously shaped to make the surface raw, but not bleeding. A strip of adhesive plaster is made to press the grafts and retain them in their place. The whole ulcer is then dressed antiseptically with a cover of protective oiled silk, over which is applied a bandage of carbolized gauze overlapping the silk by two or three inches, and at least eight folds thick. Under this dressing the grafts may be allowed to lie without the putrefaction of the discharge, even six or eight days; at the end of which time it is common to find some, if not all, of the grafts adhering. Some keep in view till cicatrization begins to spread out from them; others disappear, except that a pale spot indicates where they were; but in most instances the change is perceptible from the place where the graft was placed.

Dr. Buchanan has tried, without success, to engraft epidermic scales scraped from the arm of a healthy person, but has discontinued the attempts.

The most important advance which has been made in skin-grafting is the employment of pieces of skin from recently *amputated limbs*. This he has practiced with extraordinary success. The number of primary amputations in the Glasgow Royal Infirmary is so great that there is never want of opportunity of getting fresh healthy skin, without having recourse to taking it from the living body. As soon as an arm or leg has been removed, for injury, the house-surgeon or dresser carries it to the ward where the case requiring grafting is. He then carefully dissects from the palm of the hand near the wrist, or the sole of the foot near the instep, where the skin is very vascular and the epidermis not too thick and hard, as many pieces as are necessary to do all the grafting required at that time. In taking grafts from a recently amputated member, much larger pieces are used than when taken from the living body; pieces about a quarter and even half an inch square having often been grafted with success. Dr. Buchanan considers that this aspect of skin-grafting has a far more important bearing on conservative surgery than on the treatment of ulcers. He has been enabled to save limbs which formerly he should certainly have amputated, where the destruction to the integument was so extensive as to preclude all possibility of cicatrization unless by the assistance afforded by skin-grafting.

Dr. Dewar has found the treatment of ulcers by skin-grafting to be very successful. To insure success, he first brings the ulcer into a healthy condition (which is absolutely necessary), with healthy granulations and signs of healing commencing round its edges. The grafts which he uses are from the size of a barleycorn to that of a split pea. Those taken from a recently amputated limb, or other part, he has found to do equally well with those taken from the living subject. Dr. Dewar has found this form of treatment of great benefit in extensive raw surfaces from burns implicating the flexures of joints, and when the cicatrix is apt to be followed by contraction.

Cancer from a Blow.

The following case is reported by Dr. BROCK, in the Leavenworth *Medical Herald*:—

Two negroes became pugilistic; one struck the other a heavy blow with a weight, on the upper lip, directly under his nose, which of necessity came in contact with his teeth. The lip was mashed into a black jelly; his front teeth were caved in. He replaced his teeth, and was able to masticate with them in a short time, although they remained loose to some extent. This was three years ago. The teeth gave him occasional pain, and in time there was a fungus growth on the gums. I saw the patient first about September of last year; examined the parts, and was not entirely satisfied as to the nature of the difficulty. I did nothing at the time; was informed by the patient that some portions of the fungus growth had been removed by another physician. I explained to him about the nature of the difficulty, and what the operation would be. He left, and I saw him no more for two months. When next I saw him I felt confident that it was a cancer, involving the injured parts, and also the superior maxillary and bones of the nose. The mouth was rapidly filling up with fungus. He consented to an operation. Drs. M. S. Thomas and Van Duyn assisted. I removed six front teeth, and then made a section of the superior maxillary. Here we rested.

After carefully surveying the ground we concluded not to interfere further, as another operation would necessitate the removal of the whole of the superior maxillary, nasal bones, and, in all probability, his eyes—then with no prospect of a permanent cure. We used no chloroform. In a very short time the mouth began to fill again with the nodular tissue, a part of which I again removed. It is surprising how very rapidly it grows. I consider this case one of simple injury, of a local character, one that would have insured success by an early operation. What gave rise to cancer in this case, I am sure I can't tell you. I know there was a constant source of irritation; but why not necrosis or caries, instead of cancer?

Syphilitic Epilepsy.

Dr. WILKS, in Guy's Hospital Reports, remarks that any departure from the usual symptoms of a true epileptic attack should excite our suspicion as to its nature and suggest some special exciting cause for it. In the "petit mal" or "grand mal" the loss of consciousness persists but for a minute or so, and after the attack the patient slowly recovers and remains well until the sixth fit. But in albuminuria, or epilepsy arising from a local cause, as syphilis, or in renal and

syphilitic eclampsia, as the fits might be called, the paroxysms occur in rapid succession, and coma may exist in the intervals; there may also be convulsion without loss of consciousness, or the attack may be accompanied by paralysis of one side. These constitute a certain class of symptoms which are at once suggestive of a local cause, as syphilis, even before the history is obtained, especially if there have been a succession of fits occurring at short intervals, accompanied by partial hemiplegia. Under these circumstances the disease may be considered due to a syphiloma between the membranes and brain; and if this be situated in one hemisphere, as is usually the case, the irritation causes the convulsion to be unilateral or predominant on one side, and to be followed by a partial paralysis of that side. At the same time, as only one hemisphere is involved, the consciousness sometimes remains. This peculiarity was noticed as long ago as 1835, by Dr. Bright. Dr. Wilks gives the history of three cases that have fallen under his care, in which great improvement resulted from the administration of the bichloride of mercury and iodide of potassium, remedies which he maintains would certainly not have been given if the symptoms had been judged of alone, and no history of the prior existence of syphilis had been obtained.

The Antiseptic Treatment of Small-pox.

This subject is carefully examined by Dr. SAMSON, in a late number of the *Practitioner*. He sums up as follows:—

We will now consider the practical duties of one who would fairly put in force the Antiseptic Treatment of a Case of Small-pox.

I. EXTERNAL DISINFECTION.—It is to be recollected that at the time when any morbid symptoms become manifest, the poison of the disease can be exhaled from the system and can infect other persons. It is therefore a first duty that all superfluous, especially woolen, materials which can arrest and retain the poison shall be removed from the sick-chamber. It is the air into which the poison is exhaled that is now the chief medium of transmission; therefore our most obvious duty is to disinfect the air. It has been declared that all methods of air-disinfectants are necessarily futile; that it cannot be charged sufficiently with any antiseptic agent to exert any appreciable effect on the germs of disease. Seeing, however, that common air supplied in moderate quantity with certain antiseptic agents will kill animalculæ, and will arrest the manifestation of fungi, and looking to the evidence attesting the good practical effect of such attempted disinfection in various epidemics, I must believe that the minute zymogens are capable of destruction even whilst floating in the air. The most valuable agents to employ for disinfecting the air of the sick-chamber are sulphurous acid and carbolic acid.

Sulphurous Acid is easily generated by burning sulphur upon an iron plate, which for purposes of safety should be placed in the middle of a vessel containing water. The only objection is the pungency of the evolved gas; but Dr. Hjaltelin, who especially recommends this method, says that his small-pox patients soon became accustomed to it, and even experienced the good effects of it upon themselves.

Carbolic Acid.—For my own part I prefer this, because I believe it to be, of all agents we are acquainted with, the most powerful as a disinfectant of the air. My experiments showed that the germs which under ordinary circumstances develop into fungi are entirely killed by a small proportion of carbolic acid present in the air supplied to the soil; and of all the volatile agents I employed, this was the most efficient and most permanent.* I always advise first that the floor of the sick-chamber be washed with water in which carbolic acid has been dissolved, and that some absorbent material moistened with the liquid acid, whence it may readily evaporate, be continuously exposed. The vaporizer of Messrs. Savory and Moore can be used with great advantage to diffuse the vapor in a larger proportion, but this must be employed only at intervals, or the fumes will become too powerful. The same firm have produced at my request an instrument which provides a sufficient and constant vaporization from an absorbent surface without any trouble or inconvenience.

II. INTERNAL DISINFECTION.—The object of this is to disinfect the living body of the sufferer, to treat the disease by acting upon its cause, and to prevent the evolution from the body of active zymogens capable of infecting other persons. For this purpose the agents employed should possess two kinds of qualities; they should be capable of antiseptic action directly upon the zymogens which are contiguous to the mucous surface, and they should be readily absorbed and diffused throughout the system without losing their antiseptic properties. The necessity of attaining the former of these objects is shown not only by the fact that, even before the disease is manifest, infecting molecules are eliminated, but by our knowledge that the multiplication of the poison takes place at many points of the mucous surfaces, as it does within the skin. Disinfection of the air passages is attained by the means just described. Dr. Hjaltelin employed in addition, sulphurous acid internally, diluted in the proportion of a drachm of the ordinary acid with an ounce of pure water, and administered every third hour. Dr. A. W. Foot, in addition to the diluted acid used as a drink, employed gargles of the same agent, sprayed the undiluted acid over nares and pharynx, or used atomized solutions of tannin, carbolic acid, and sulphurous acid for the same purpose, caused the body to be washed with a solution of the

* The Antiseptic System, p. 104.

acid, and sprinkled it about the bed and bed-clothes. The use of many of these plans is attended with comfort to the patient as well as advantage to the attendants; but as a general rule I am content with allowing the patient to breathe an atmosphere rendered antiseptic, without employing any of the other means. The most important point that we should endeavor to attain is to antisept the tissues of the living body. Is this *prima facie* impossible? No, for we have positive evidence that we can administer to a living animal an antiseptic substance which shall permeate all its tissues and entirely prevent post-mortem decomposition. The structures of an animal so influenced will dry up, but will undergo no putrefaction whatever. It is undeniable, however, that great difficulties stand in the way; the chief, when we are first called to see a case of small-pox, a great portion of the mischief is already wrought. The zymogens have done their silent work; in some cases the petechiæ and ecchymoses show that such a destruction is already accomplished, that all means are hopeless. I have had evidence, however, that a petechial case, if it comes under care during the initiatory fever, is not necessarily fatal. One case, petechial and confluent, which presented the most alarming symptoms, completely recovered in my hands, under the antiseptic plan of treatment, in twenty-one days. The agents which have been recommended for internal administration are:—

1. *Sulphurous Acid.*—This, as has been before observed, is a most efficient direct antiseptic, and it has been employed with apparently much advantage by many observers, especially Dr. Hjaltelin; but I think there are great doubts as to its efficacy as an antiseptic upon the tissues. I know of no evidence whatever in favor of the view that it can circulate as a free acid in the blood, while there are abundant probabilities that when absorbed into the blood it is neutralized by the alkaline constituents; in such case it would only reach the tissues in the form of an alkaline sulphite, and that in very small proportion.

2. *Carbolic Acid.*—The evidence is very conflicting as to the efficacy of this agent, internally administered, in small-pox, or indeed any other zymotic disease. It is to be recollected that it is administered with difficulty on account of its nauseousness, and it has a powerful toxic action. To exercise after its absorption any real antiseptic effect, it must be given in large quantities; in my own opinion, a dose that would be efficient as an antiseptic would be highly dangerous; moreover, the character of the symptoms which it induces, especially the cerebral plethora, renders great caution necessary with reference to its administration in small-pox, and it tends not to abide in the system, but be rapidly excreted. According to my view, those who employ carbolic acid as an internal remedy in the usual doses do not really put in force the antiseptic treatment.

3. *The Alkaline Sulphites*, introduced by Polli in 1857, have these characteristics: They are readily absorbed; they circulate unchanged in the blood; they permeate the tissues, so that they can be recognized in and recovered from them as sulphites, a portion only being excreted oxidized as sulphates; they tend to accumulate in the tissues, but yet exert no deleterious action; and they are powerful antiseptics. I believe them to be very valuable agents for internal administration in small-pox. I employ sulphite of sodium in 20 to 30-grain doses dissolved in water, repeated every third or fourth hour.

4. *The Alkaline Sulpho-carbolates.*—According to my views, the action of these salts is as follows: they are readily absorbed, and, like the sulphites, easily permeate the tissues; they are not direct antiseptics like the sulphites, but, becoming decomposed, they liberate free carbolic acid, which exercises its antiseptic action. The antiseptic effect is evidenced upon the tissues and upon the urine, which resist putrefaction. I am accustomed in small-pox to administer 20 to 30 grains of the sulpho-carbolate of sodium every third or fourth hour. Dr. A. W. Foot has lately strongly corroborated my own views as to the efficacy of these agents internally administered in cases of small-pox.* I can only say that I have seen recovery take place in cases which appeared absolutely hopeless. As to the comparative value of the sulphites and the sulpho-carbolates, I think there is room for doubt. I have feared, in cases which have manifested cerebral symptoms, to administer the latter, in case the liberated carbolic acid might aggravate any tendency to encephalic hyperæmia: in such cases I have preferred the sulphites. I have never seen, however, graver symptoms than transient vertigo and headache follow the administration of the sulpho-carbolates in any case.

Relation of Chlorosis to Menstruation.

The following remarks are by Dr. WADE, in the *British Medical Journal*:—

We meet with women who all their lives have most copious monthly discharges, and seem certainly none the worse, but rather better for them. We meet, on the other hand, with very many girls who, after a moderate primary menstruation, exhibit symptoms of anæmia; and these increase after each successive menstruation, though these may be, and often are, smaller in amount. The period of relief also becomes shorter.

These remarks, you see, are intended to meet the objection that chlorosis cannot be the consequence of menstruation, because the menstruation which has preceded it, and which I take to be the cause of it, has been small in quantity.

In some cases, however, menstruation is established, and proceeds in orderly and re-

* Dublin *Journal of Medical Science*, March, 1872.

gular manner for some, even it may be for many, months; and very rarely, but still sometimes, without any apparent excess of menstruation or obvious cause, symptoms of chlorosis show themselves. Well, it is not difficult to understand that, if the system have been just able to reproduce in the intervals the blood lost at each successive period, any slight disorder which at all impaired the nutritive powers should destroy the balance which had been previously only just maintained between loss and repair.

A much more common clinical history given to us is that, at a certain menstrual epoch coincident with the commencement of the chlorosis, the girl had caught cold, that the flow had been suppressed, and that this was the cause of her condition. Now, I will not deny that it does sometimes happen that the menses may be suddenly suppressed in this way. I have seen a few—but very few—such cases; and the symptoms produced by the suppression are very serious. But I have not seen that anæmia was one of them. On the other hand, I have minutely investigated a great number of these alleged cases, and have invariably found that a diminution of the flow was the only symptom that had been observed; in a large number of them—indeed, the greater proportion—there was no other evidence, either direct or indirect, to show that the restricted discharge had resulted from any exposure to cold or wet, or from any catching of cold. The statement which is made to us, as if it were the statement of a fact, is merely the statement of an opinion. The menses have been scanty; and the girl, or more frequently her mother, knowing no other explanation, *supposes* that she *must have* caught cold. The constancy with which this statement can be exposed by searching cross-examination is really quite ludicrous.

These cases, some of them, come under the category which I previously described. But in a much larger number the real explanation is exactly opposite to the supposed one, and in complete accordance with the theory which I have been explaining to you. The true clinical history is this. The menstruation immediately preceding the first scanty one has, from some accidental cause—dancing, riding, traveling, or some over-exertion or unusual excitement—been excessive; that is, as compared with the patient's usual habit. The scantiness of the succeeding period is what is called "an effort of nature" to diminish the ill effects of a renewed hemorrhage upon a system which had not completely recovered from a previous one. And I may here remark that, as a rule, the worst cases of chlorosis are those in which the energy of the reproductive organs is not to be suppressed by the incapacity of the system at large to support the tax thrown upon it; in those cases, in short, in which the menses, in spite of the bloodlessness of the body, continue to reappear month by month. That the blood-making organs should at first fail, but subsequently be able to respond to the unusual tax upon them which is caused by a first menstruation, is quite in harmony with the physiological laws governing other organs. If we suddenly call upon a muscle for unwonted exertion, the muscle either fails to respond, or afterwards suffers. But the same muscle may, by a sufficiently gradual exercise, be well able to expend not only that, but a much greater amount of force, without inconvenience at the time, or unpleasant consequences afterwards.

I will mention here, what ought perhaps to have been mentioned earlier, one reason why the profession have supposed chlorosis to precede menstruation more frequently than it really does. Many mothers, when asked whether their daughters "have ever been regular"—which is the usual way of putting the question—will answer "No;" meaning thereby that the function has never been regularly established. You must, if you desire the truth upon this point, put the question in a more precise manner, and ask whether there has ever been any menstrual discharge whatever. You will then, if you insist upon a precise answer, get the precise truth. It is very important, in examining patients, to let them tell their own tale, but it is equally important to cross-examine them upon their statement. They are so much in the habit, and especially so in these cases, of mixing up fact and opinion, that you will not in any other way arrive at the truth. The random way in which many ill-educated persons—and these are to be found in all classes of society—answer even vital questions, is often little short of astounding. It is worth mentioning that even in very many women who are not at all chlorotic, the menstrual flow produces just the same effect as any other small bleeding would do, viz., a feeling of lightness and elasticity.

I have now laid before you with sufficient fullness my reasons for thinking that the following propositions are just.

1. Chlorosis occurring in young women who have menstruated at all is commonly the result of the loss of blood by the menstrual discharge.

2. When amenorrhœa occurs in these persons, it is a consequence and not a cause of this anæmia.

3. Both primary and subsequent menstruations produce on the system the same effects that would be produced by any other hemorrhage of equal amount.

These views are not only interesting to the abstract physiologist or pathologist, but they have a very distinctly practical bearing.

I can give you no better advice upon the general principles of treatment than you will find in the text-books generally. The patients generally soon recover with rest, good diet, and steel. Where, as sometimes you may find, steel alone will not cure, you may combine with it some preparation of manganese; or, what is often better, substitute arsenic. Constipation is a very common result of hemorrhage; it was so in the third case of epistaxis before mentioned; it

is not, therefore, a matter of any surprise that it should be, as it is, common in chlorosis. Here it seems to depend in a great measure upon the torpor of the colon. On this account aloes is often a useful purgative, and so is strychnia. If you should find, which you probably will not, that the former drug increases the menstrual flow, you will substitute one that does not. This observation is not superfluous, since we find that so judicious an authority as Dr. Wood says: "If amenorrhœa exists, aloes is the appropriate laxative," meaning thereby to endorse the view that aloes excites the ovario-uterine system. You will scarcely be disposed to follow the advice which Dr. Aitken gives on the authority of Vogel: "Where a high degree of serous plethora exists, and produces violent excitement of the vascular system, palpitation of the heart, and congestion of the head, venesection may be practiced. It not only acts as a sedative, but aids the radical cure of the disease, inasmuch as it causes the subsequently administered ferruginous preparations to be borne more easily. Both general and local blood-lettings may be used; but the blood must be taken in small quantities, a couple of ounces at a time being quite sufficient."

In such a case you should diminish or omit the iron for a time, and use morphia or bromide of potassium, with chloral, or valerian, or stimulants in small quantities. Instead of seeking to increase the quantity of the menstrual discharge, you will rather aim at diminishing it, particularly in cases where it keeps up in quantity whilst the patient is becoming more and more chlorotic. This diminution we may effect by keeping the patient in bed or on a couch for a couple of days before menstruation begins, and also whilst it is in progress; giving, at the same time, some bromide of potassium till the period is half over, and then using extract of ergot. Digitalis in some cases checks the flow, and this may be used instead of ergot when this drug seems to have no effect.

Cases of Liver Disease.

The following instructive cases are reported by Dr. E. L. Fox to the *British Medical Journal*:—

The cases referred to in this paper were not all due to one and the same condition of liver, but they were examples of peculiarities which are either unusual or obscure.

A man, aged 50, was a patient in the Bristol Royal Infirmary, under Dr. Brittan (by whose courtesy I am allowed to mention the case here). He had only been ill for seven weeks, with intense jaundice, and the troublesome itching consequent on the jaundice. He had had hemorrhage from various surfaces, and had passed blood *per anum*. The liver during life was seen to be much enlarged, but was smooth. At the necropsy the heart was found to be fatty. The lungs were healthy. There was a little recent inflammation of the lower portions of the right pleura. The liver was very large; the ducts were much dilated all through the organ. The gall-bladder was enormously large, full of black bile. The ductus choledochus was very large down to within half an inch of what should have been its entrance into the duodenum. Here it was entirely blocked, not with gall-stones, nor with any thickened secretion, but apparently as the result of inflammatory thickening. What should have been the duct was transformed into fibroid tissue, and could never have again become patent. The pressure of the occluded bile had very nearly produced an artificial opening into the duodenum lower down. The spleen was rather large. The mucous membrane of the small intestine through its whole extent was covered with blood. The kidneys were much tinged with biliary pigment.

A gentleman, aged 63, was first seen in May, 1870. He had been ailing for two months previously, and had complained of constant slight pain in the right hypochondrium. About five or six weeks previously he became sadly jaundiced, and was very actively treated with calomel and podophyllin. In the first week of his illness he once passed bile *per anum*, never since. He was always a spare man, but rapidly emaciated. He had lately been taking Turkish baths. Twenty years ago he passed some gall-stones, but without pain and without jaundice. No tumor could be felt. There were some tension and tenderness over the head of the right rectus abdominis, especially on deep pressure. There was no ascites. He had intense jaundice. The bowels were confined. A little albumen was present in the urine. Sir William Jenner came down to see him, and gave as his opinion that the disease was probably a cancerous gland pressing upon the common duct, but that it was possible that the patient was suffering from a thickening, and a remediable thickening, of the duct itself. He suffered terribly from the icteric itching of the skin, and sank, rather suddenly, about a month after first coming under my observation. Death was preceded by twelve hours of coma. No *post-mortem* examination was allowed.

A surgeon, aged 70, who had been doing a large country practice for many years, was first seen in the autumn of 1870, at his own house, some miles from Bristol. He had been ailing for ten months, and had been jaundiced for the last six months of the time. His state at the date of my visit was one of great mental and bodily depression, and he was much emaciated. The left lobe of the liver was enlarged, but smooth. There was no pain or tenderness. The itching of the skin was terrible. A very little bile had been passed at stool on several occasions during his illness. He answered questions pretty well, but wandered slightly at times. The diagnosis lay between cancer of the lower surface of the liver and a remediable thickening of the duct itself. Having regard to the latter possibility, he

took iodide of potassium, and pills containing blue pill, belladonna, and taraxacum. Six months afterwards he paid me a visit at Clifton, looking ten years younger, and perfectly well.

These four cases illustrate to my mind this somewhat unusual condition, subinflammatory thickening of the duct itself. The diagnosis between this affection and cancer of the lower portion of the liver is very obscure and difficult. I think that in this condition the jaundice is more sudden, the icteric itching more intense, the emaciation more rapid, the tendency to cerebral symptoms greater than in cancer, whilst the pain or tenderness over the region of the liver is generally less. But either may cause death; either may lead to congestion of the portal vessels, and, as a consequence of this, to hemorrhage into the stomach or intestinal canal, rather than to ascites. Three out of these four patients were very sober men, and of the fourth I have no record.

I believe it to be especially a disease of advancing age, and to bear the same relation to the catarrh of the duct often met with in the jaundice of childhood, that fibroid induration of the lung bears to catarrh of the bronchi and air-cells.

Hooping-Cough Treated by Chloral.

Dr. P. BRYNBERG PORTER, Attending Physician to the New York Free Dispensary for Sick Children, and for Diseases of Women at the Northeastern Dispensary, says, in the New York *Medical Journal*:—

Nearly all my cases of hooping-cough having occurred in dispensary practice, which is proverbially unsatisfactory on account of the difficulty of obtaining results, the following are all that I have been able to observe up to the termination of the affection.

I have prescribed chloral hydrate in quite a large number of cases besides these; but the patients either reported but once, or neglected to return at all, so that I could preserve no record of them.

I will state, however, that in not a single case, as far as could be ascertained, was the hydrate exhibited without its being followed by an alleviation of the symptoms.

Thus, in a patient suffering from a very serious attack, complicated by severe bronchitis, I found a very marked improvement at the end of three days from the time I had prescribed it. In this case, however, syrup of ipecacuanha and syrup of squills, with turpentine stupes externally, were employed for the relief of the bronchitis.

In no case was any injurious effect observed to be produced by the chloral.

September 28, 1871.—David R., aged two and a half years. Has been sick for over a week, and the characteristic paroxysms have already commenced. Ordered tincture of belladonna and "brown mixture."

October 5th.—No better. Seems to have derived no benefit from the treatmen'. Ordered one and a half grain chloral hydrate, in syrup and water, every three hours.

7th.—Marked improvement. Paroxysms much less frequent as well as less severe. Ordered the same to be continued.

19th.—Got so much better by the time the last bottle was used that the mother thought it was not worth while to return for any more. The cough is worse again now. Ordered the chloral in the same dose. Steady improvement.

June 17, 1872.—Annie D., aged twenty-one months. Cough has lasted three weeks. Commenced to hoop one week ago. Paroxysms very severe now. Ordered two grains of chloral every three hours.

19th.—Paroxysms less frequent, but equally severe. Increased chloral to two and a half grains.

24th.—Remarkable improvement. Has no severe paroxysms whatever. Ordered the same continued.

26th.—The cough "broken." Does not hoop at all. The child is practically well.

June 24th.—Mary R., aged ten months. Has had pertussis five weeks. Paroxysms of alarming violence. Ordered one grain chloral every three hours.

26th.—Improvement almost magical. Paroxysms very much less frequent and severe. The little patient much easier and better in every respect, and the mother delighted. Increased chloral to one and a quarter grain.

28th.—The improvement still continues. Scarcely suffers at all from the paroxysms. Increased chloral to one and a half grain.

July 3d.—The hoop entirely disappeared some days ago. Has no paroxysms whatever. Doing capitally in every respect. A little trace of bronchitis all that is left.

As the result of my experience, I would state, therefore, that I am fully convinced of the marked effect of chloral hydrate in alleviating the symptoms of pertussis, and that there seems to be some evidence (though my number of cases are certainly very limited) to show that it has a positive effect in cutting short the disorder. It is the only remedy I have employed in this affection at the Children's Dispensary for some time.

Laminaria in Stricture.

In the New York *Medical Record* the following are some of the conclusions arrived at by Dr. NEWMAN:—

1. The bougies must be made from an unblemished piece of the plant, taken out of the middle, made with care, and equal in its whole length and size. If there is the slightest suspicion of unevenness, it should not be used.

2. That part of the bougie which will occupy the portion of the urethra below the last stricture, and particularly *that* part of the bougie which enters the bladder, must be varnished previously. Mastic-varnish can be used. If the varnish is applied just before using, the laminaria may dilate a little, but if several coats are applied and allowed to dry, no expansion can take place.

3. As any oily substance hinders the expansion, no oil must be used. The bougie

before introduction must be placed in cold water, until it gets a soft, velvet-like touch.

4. The bladder must be emptied before the operation, to avoid uneasiness and over-distension.

5. The urethra ought to be injected with water, to relax the parts and favor the moisture for rapid dilatation.

6. The measure of the urethra and seat of strictures must be carefully taken, notes made, and the bougie prepared accordingly.

7. The bougie, when ready, must be introduced at once, straight, without hesitation, twisting, or resting in its passage; otherwise it will cause pain, or, as dilatation goes on immediately, it will not reach the desired depth.

8. After insertion, the bougie must be left alone, and not meddled with, or tried to move.

9. It must be left inside undisturbed for from two to four hours, according to circumstances, consulting the feeling of the patient.

10. The patient during this time is left in a recumbent position, and attended or observed by the surgeon.

11. In removing the bougie, the surgeon takes hold of the bougie, and uses, firmly and gradually, tractions in the same direction.

If some surgeons have failed with laminaria, they either have not observed these precautions, or they have had imperfect bougies, or selected impracticable cases.

This treatment is most indicated when the stricture is very small, almost impermeable, and no time can be lost, as the No. 1 bougie of laminaria can be introduced easier than the usual sounds or catheters. In a few hours the patient is relieved, and can micturate without difficulty. No bad results can follow, nor will it interfere with his attention to business. This latter advantage is a great consideration, as the treatment with divulsors or dilators almost always causes pain, sufferings and detention in bed and from business. As soon as the stricture is dilated so far that a steel sound of a larger calibre can be introduced, the laminaria has done its duty, and it is better to abandon its further use, and continue with other means. These are either steel sounds or galvanism.

Action of Quinine on the Colorless Blood Corpuscles.

In the *Practitioner*, Dr. GELTOWSKY relates some experiments on this subject, and concludes:—

From these experiments it follows:—

a. That quinine arrests the movements of the colorless globules of the newt's blood, if it is used in the proportion of one part to 800 or 900 parts.

b. That the globules of the female's blood resist longer the action of quinine.

c. That the globules of the blood of animals enfeebled by the loss of blood in previous experiments resist the action of quinine a shorter time than the globules of animals entirely fresh.

d. That the solution of quinine, whether it be in water or in serum, acts with the same force. As regards the solution of quinine in serum, it is remarkable that the movement of the colorless globules ceases in a much shorter time if the serum is not perfectly fresh, although the reaction be neither more nor less alkaline than that of normal serum. I found, for instance, that in a preparation which contained two drops rabbit's serum kept for twenty-four hours after the animal died, and three drops of newt's blood, after half an hour the movement of the colorless globules had entirely ceased.

On injecting into the blood, doses which cause the death of animals, quinine has no influence on the colorless blood-corpuscles. Even if the quinine had had the same influence on the colorless corpuscles of the blood in the interior of the organism as under the microscope, it would have been impossible to explain, by the action of quinine on the colorless corpuscles, the cure of certain maladies under treatment by this drug, because, according to the preceding experiments, it is necessary to employ one part of quinine to 2800 parts of the blood of man. Hence, in the case of a man in whom the quantity of blood would amount to about 15 to 20 pounds, it would be necessary, in order to obtain the special effect, to take almost one drachm of quinine, which would be impossible.

I am therefore not able to affirm that quinine has an influence on the quantity of colorless blood-corpuscles in the organism; and I wish only to say that in leukæmia, under treatment by that drug, the decrease of these blood-corpuscles must be explained in some other way, and not by simple direct action of quinine on colorless blood-corpuscles; for instance, by direct action on the nervous system and indirect action on the glands, or other organs whose function it may be to give rise to or to destroy the colorless blood-corpuscles. But that would be a pure supposition, and not a result proved by experiment.

After-treatment in Surgery.

In a late number of the London *Medical Times and Gazette*, Dr. LEDIARD makes the following remarks:—

Carbolized catgut ligatures were used in all cases, and as a rule they were not seen again after the closing up of the flaps. To arteries in their continuity Mr. Spence uses silk. Dry cold was applied immediately after operation to all cases unless there was some special reason to the contrary, the method of application being as follows: The ice is pounded into small pieces and put into bags made of gutta-percha, chloroform sealing up the margin and rendering the bag water-tight. The bags are not to be put over the incision, but on either side. The dry cold was not kept on for more than forty-eight hours; in many cases not so long. The majority of cases were dressed, from first to

last, with a piece of oilskin dipped in dextrine, over the line of incision, and the entire wound covered with gutta-percha; the benefit of such treatment being that the discharge is not confined, and it is possible to see what is going on without removing the dressing. After the ice is given up, the gutta-percha is narrowed to the line of incision, so as not to retain cutaneous transpiration and create moisture, which tends to disorganize the connecting plasma. In all cases, stitches were removed as soon as possible, and replaced by ordinary strapping. In three cases of amputation there was reactionary hemorrhage to a small amount, requiring, however, the flaps to be taken down. In the majority of cases small abscesses formed during the healing; these seemed to be of service, allowing the incision to unite, and acting as a drain at a dependent part. The lotions employed were chlorinated soda, sulphate of zinc, chloride of zinc, carbolic acid, Condy, and in some cases simple water.

Treatment of Subclavian Aneurism.

A long paper on this subject appears in the last volume of the Guy's Hospital Reports, by Mr. POLAND, in continuation of a similar one in the preceding volume. In the present paper the principal points taken up are: 1. Ligature of the first portion of the subclavian artery for the cure of subclavian aneurism. Eleven cases are on record of this operation having been performed. As Mr. Poland observes, it is fraught with danger, and is for the most part undertaken against the acknowledged rules laid down for the success of ligature of a large artery in aneurism, the vessel being tied close to the aneurismal sac, at a point where large and important vessels are given off from it, and where it is in proximity with nerves, veins, and the pleura. In some subjects one incision is sufficient, but in fact two will be found requisite. All the cases recorded, with one exception, were of the right subclavian. The operation is pronounced by Ferguson the most difficult in surgery, and it is doubtful whether it should be again attempted, every case having proved fatal, though with different symptoms. The longest duration of life was thirty-six days. 2. Simultaneous ligature of the first portion of the subclavian and common carotid arteries. This operation has also proved uniformly fatal. 3. Ligature of the innominate. This has been performed twelve times without one case of success, though in a case under Graefe the patient lived to the sixty-seventh day.

AMERICAN MEDICAL ASSOCIATION.

The Triennial list of Permanent Members will be published this year. Permanent Members who have not paid their assessment will please notice:—

"Any Permanent Member who shall fail to pay his annual dues for *three successive years*, unless absent from the country, shall be dropped from the roll of Permanent Members."

WM. B. ATKINSON,
Permanent Secretary.

Medical journals please copy.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

Syphilis, its Nature and Treatment; With a Chapter on Gonorrhœa. By CHARLES ROBERT DRYSDALE, M. D., etc. London: Bailliere, Tindall & Co., 1872. Cloth, 8vo. pp. 165. Price 4s. 6d.

All interested in the progress of syphilography must not fail to peruse this closely argued treatise of Dr. DRYSDALE, a clinical observer of wide experience, and a calm and acute reasoner. Without pretending to criticise the views he advocates, we shall simply give his position on some of the much debated topics he handles.

On the great question of the unity or duality of the syphilitic virus, he is evidently more inclined to take a middle ground than he was some years ago. Formerly we considered him a decided dualist; but now he candidly acknowledges (p. 43) that soft chancres are, although rarely, followed by syphilis. He quotes, with approval (p. 73), Dr. KENNEDY'S saying, "the soft sore *may* infect, the hard sore always does." But *in practice*, he prefers the dualistic theory, because syphilis is so rare from a chancroid.

He believes that in *rare* cases healthy mothers may bring forth syphilitic children, infected directly from the father, in this opposing the views of many.

The disease itself, he believes, probably came from America, introduced by the sailors of Columbus at his first voyage. In treatment he discards mercury. He thinks it "rather too dangerous a remedy to be used in most cases of syphilis." He treats all cases by the compounds of iodine.

His opinions are advanced cautiously but decisively, and they merit a most careful perusal. There is an air of judicial impartiality in the way in which he quotes and criticises the arguments of opposing writers which we rarely see in a medical book.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 24, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THEORIES OF FERMENTATION.

The favorite theory of the day, which attributes so much to the action of minute organisms, has long been applied to explain the changes which take place in fermentation. The doctrine advanced and sturdily advocated by LIEBIG, to the effect that fermentation is an essentially chemical phenomenon, has, in the minds of many, been supplanted by the doctrines of PASTEUR and his disciples, who find in the nigh omnipresent activity of germs a totally different explanation of the same processes.

These discussions interest physicians closely, for much of the famous and popular "germ theory of disease" stands or falls with the application of that same theory to the fermenting of organic products.

In spite of the recent protest of LIEBIG, and the tenacity with which many older chemists cling to his views, no doubt most younger observers incline to the germ explanation of the changes in question.

One able chemist, however, has lately attacked with the weapons of satire as well as close experiment the doctrines of PASTEUR. We refer to the Baron DU MESNIL. A recent number of the *Journal of Applied Chemistry* contains a translation of some of his views. He regards fermentation as a purely chemical act, nothing else in fact than a slow combustion, but brought about, not by the oxygen of the air but by the oxygen of water. It is a burning up by water. Thus he says:—

Combustion is the oxidation of a body by the oxygen of the air. Fermentation is the oxidation of a body by the oxygen liberated when water is decomposed.

Combustion takes place only at a red heat. Place a strip of polished iron in a receiver, and subject it to a pressure of 10 atmospheres of oxygen, and it will not be tarnished. Combustion seems to be the effect of a galvanic battery while it produces heat without electricity. Whether heat and electricity be the same, and whether heat be produced by the direct union of the two electricities, is uncertain. We generally think that when a jet of steam passes over glowing coals it is decomposed in order to be recomposed, and that the heat ought to be more intense; yet we think that green wood, when thoroughly ignited, burns more brilliantly than dry wood. If these observations are correct, it follows that in the fire there is a decomposition and recomposition of water, consequently a double electric shock; without this effect, the heat of the fire would be diminished to the extent necessary for evaporating the water. In all these cases, the latent heat set free will not suffice to explain the intensity of the heat produced.

Fermentation causes the decomposition of water and the oxidation of the combustible bodies under the greatest cold, and in the vats it develops a considerable heat, the result of the direct reunion of the two electricities. It is necessary, however, in order that it should attack the carbon of the sugar, that the heat be more than 10 degrees.

It is evidently the result of the action of an electric pile giving heat without electricity—as if the zinc were replaced by iron in a galvanic battery. In the old condition of science this action was called double chemical affinity. Thus a steam boiler may be subjected to the heat of the fire, as well as that of the steam and water at a high temperature, for 10 years without oxidizing, because it is not in the condition for fermenta-

tion; while a gun, though varnished and greased, which gets a few drops of water on it, is found the next day covered with rust, because the drops of water are penetrated with air, which contains oxygen and carbonic acid, so that the water is decomposed on the iron which is found in the conditions of fermentation, and this acts in spite of the greatest cold.

Having thus explained what, in his view, the true theory of the process is, he proceeds to exhibit the fallacies and weaknesses of the opposite hypothesis. He remarks:—

The popular view of fermentation considers it to be the action of animated atoms, revived from the Greeks and from the false Lucretius, just as any one may notice, at his leisure, how a ray of light passing through a small hole in a shutter illuminates a dark room and discloses a whole new world of natural history. These are vibrios and mycodermes, one of which makes the wine and the other the vinegar. It is friend and enemy all at once; they kill like the diseases in the hospitals, and in order to cure them it is necessary to arrest them on the door sill of the establishment by burning them. According to M. PASTEUR, these species of gnomes fall down perpendicularly from the sky. They never reascend from the earth, and have the prudence not to entangle themselves in the mouth of a vessel which is inverted.

This confirms what savants have observed in the vibrios of beer, that when the ferment is in action some species of little fellows are seen to come and go by the action of the electric pile. However, Thenard observed, fifty years ago, that when the ferment was exposed to the heat of boiling water it lost its fermenting properties. In fact, since PASTEUR'S system kills the mycodermes at 60° C., with still more reason these vibrios ought to be killed at 100° C. But Thenard observes that after eight days the yeast of the beer regains its fermenting power.

This is explained chemically. Ammonia is the electric principle which makes the beer; in the North, garbage is found in beer. Ammonia constitutes the attractive pile for the nitrogenous part of the wine, whether it comes from the bitter principle or from putrid fermentation; but the yeast of the beer is a vegeto-animal, and is decomposed anew and again produces ammonia.

If we study the most recent works on natural history the dead vibrios are found revived. Thus, this living dust, if useful and at the same time destructive, will have the special power of resurrection.

NOTES AND COMMENTS.

Mad Dogs.

The Council of Hygiene, of Bordeaux, says the *British Medical Journal*, has issued the following instructions:—"A short time, sometimes two days, after the madness has seized the dog, it creates disturbances in the usual condition of the animal, which it is indispensable to know. 1. There is agitation and restlessness; the dog turns himself continually in his kennel. If he be at liberty, he goes and comes, and seems to be seeking something; then he remains motionless, as if waiting; he starts, bites the air, seems as if he would catch a fly, and dashes himself, howling and barking, against the wall. The voice of his master dissipates these hallucinations; the dog obeys, but slowly, with hesitation, as if with regret. 2. He does not try to bite; he is gentle, even affectionate, and he eats and drinks; but he gnaws his litter, the ends of the curtains, the padding of cushions, the coverlids of beds, the carpets, etc. 3. By the movement of his paws about the sides of his open mouth, one might think he was wishing to free his throat of a bone. 4. His voice has undergone such a change that it is impossible not to be struck by it. 5. The dog begins to fight with other dogs; this is decidedly a characteristic sign, if the dog be generally of a peaceful nature. The numbers 3, 4, and 5, indicate an already very advanced period of the disease, and the time is at hand when man will be exposed to the dangerous fits of the animal, if immediate measures be not taken. These measures are to chain him up as dangerous, or, better still, to destroy him."

Charges Against Lunatic Asylums.

We have repeatedly noticed in these pages the unfounded charges brought against lunatic asylums and their management. The Bloomingdale (N. Y.) Asylum has been lately made the subject of these attacks, as also the New Jersey State Lunatic Asylum. The management of both these Institutions has always been creditable, and in reference to the latter, so far

from there being any attempt to detain patients unnecessarily, it is overcrowded already, and no further admissions will be received until some of the present patients are disposed of. It is one of the most carefully conducted establishments of the kind in our country.

CORRESPONDENCE.

Attributing Good Results to the Wrong Agency.

EDS. MED. AND SURG. REPORTER:

In the REPORTER, for June 22d, 1872, THOMAS BARROW, M. D., of Baltimore, Md., reports many cases of bronchitis treated with—

Syrup. senegæ,
Misturæ glycyrrhiz. comp.,
Ant. et pot. tartras,
Morphia sulphas.

The human organism is so complex, the manifestation of disease, and the effect of remedies so various, that as yet our knowledge of pathology and of therapeutics is limited indeed.

But I apprehend that much of our ignorance is due to improper methods of observation.

With our present mode, or fashion rather, of using mixed prescriptions, nothing is easier than to attribute good results to a wrong agency. Nothing retards the progress of our knowledge so much as this. In this way we trace an effect to a cause, when in fact many agencies have been operative in producing it. By putting the attention upon one agency, we lose sight of others equally as important in producing the observed result.

Until physicians shall learn to use simple prescriptions, when they wish to observe and REPORT therapeutic effects, we shall ever remain in ignorance of the true value of any one medicine.

The paper above referred to is entitled "Seneca as a Bronchial Alterative." And in each prescription syrup of seneca is the basis. Nevertheless, in each is sixteen simple drugs, each of which, doubtless, aided in the general effect. Yet, from the tenor of the article, to seneca alone is ascribed the power of cure.

Seneca is certainly a valuable drug; but if *compelled* to omit one of two ingredients in the above recipe, either Seneca or Morphia, in the treatment of bronchitis, accompanied by cough, nine practitioners out of ten would omit Seneca, since syrup

Mistura glycyr. comp.,
Ant. et pot. tartras,

each exert a peculiar effect upon the bronchial mucous membrane.

I would not reflect upon the article referred to more than on others of like character which are constantly meeting my attention.

I hope Radix Senega will be used; but let its virtues be made known when used alone, for then only can the profession decide upon its merits.

D. R. SILVER, M. D.

Sidney, Ohio.

NEWS AND MISCELLANY.

IT has lately been discovered that the carbonates of potash and soda possess the same property of protecting iron and steel from rust as do those alkalies in a caustic state.

THE State Hospital at New Haven, Connecticut, will be at once enlarged by the building of two wings, at an expense of $40,000, of which the State bears half, and the other half is raised by subscription.

MARRIAGES.

DE VENY—MCGILL.—In Syracuse, N. Y., July 1, by Rev. Joseph M. Clarke, D. D., S. Charles De Veny, M. D., of Williamstown, Pa., and Miss Minnie C., only daughter of the late W. C. McGill, of Simcoe, Ontario.

DEATHS.

ANDERSON.—At Blairgowrie, Palo Alto county, Iowa, on the 12th of August, Tom Anderson, eldest son of Eliza P. and the late Alexander Anderson, M. D., of Jedburg, Scotland.

BARRON.—In Brooklyn, New York, August 8, HENRY W. BARRON, M. D., in the 38th year of his age.

BASSETT.—Suddenly, in Wilton, Connecticut, Frankie Lee, only son of Dr. B. F. and M. L. Bassett, aged 2 years and 5 months.

BELL.—In Philadelphia, on the evening of August 19, 1872, Dr. John Bell, in the 77th year of his age.

BIGELOW.—At Englewood, the 15th inst., Mabel Edwards, infant daughter of the late Dr. James and Minnie Bigelow, aged 18 months and 29 days.

BISHOP.—In New York, August 12th, Hannah Maria, wife of Dr. E. H. Bishop.

EPPES.—August 11th, Elizabeth Thorp, daughter of Dr. Richard and Elizabeth W. Eppes, of City Point, Va., aged 2 years.

HUMPHREY.—On the 3d inst., at Beverly, N. J., Gideon Humphrey, M. D., aged 94 years.

HUNTER.—In New York, on Tuesday, August 6, Galen Hunter, M. D., aged 72 years.

KNIGHT.—At Metuchen, N. J., August 6, William Knight, M. D, son of the late Rev. Dr. William Knight.

VANDERBECK.—Sweetly fell asleep in Jesus, Aug. 14, 1872, Fannie J. McDole, wife of C. C. Vanderbeck, M. D., of Valentine, N. J., and youngest daughter of Andrew and Eliza J. McDole, in the 21st year of her age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 809.] PHILADELPHIA, AUGUST 31, 1872. [Vol. XXVII.—No. 9.

Original Department.

Communications.

AN ESSAY ON THE ART OF SWIMMING, CONSIDERED AS A MEANS OF SAFETY, HYGIENE AND PLEASURE.

By Chauncey F. Perkins, M. D., LL.D.,
Of Erie, Pa.

The Art of Swimming is, perhaps, as old as any other mode of self-conveyance or transportation, if we except that of walking. Man and quadrupeds must, from the first, have used their legs in perambulating the earth; but it could have been scarcely more than a very brief, a momentary lapse of time, till some one of the newly created animals must, either from necessity or choice, been impelled to try the sustaining power of an element which, flowing on every hand, he might meet with in his rambles, and *opus natare est*, find it necessary to swim. Numerous are the animals that exhibit a fondness for the water, and seek occasion to float upon its surface, or submerge themselves in its depths. The beaver, the otter, and the muskrat, the dog, and a hundred other quadrupeds apparently feel as safe on this element as on the land. They plunge into it at a moment's warning, and though they may sink to the ears, swim with an agility and a regularity of motion that manifest their entire confidence in the efficiency of its sustaining power, and a self-possession that seldom ever allows them to be drowned. They swim upon the quiet pool, and skim along the sleeping lake, and with almost equal facility mount the billow and pierce its foaming crest.

To some animals the Creator has given peculiar facilities for swimming, and such, especially, are the *anseres*, whose remarkable adaptation ought alone to convince the atheist of the existence of a designing Divinity, and open his eyes to behold all around him the bright emanations of His being. Both in form and specific gravity, the goose, the duck, and the swan are admirably fitted to float high and safely, and could not drown but by assuming a most unnatural position. Our business, however, is not with those creatures gifted with properties which render a fatal submersion impossible; the goose and the swan, for aught we know to the contrary, might, like the amphibiæ, spend the best half of their life upon the water. Nor is it necessary to consider the natant powers of the animals which, like man, live wholly upon the land, excepting in so far as it may assist in illustrating the subject in relation to the latter, and show how far, and under what circumstances, men may trust themselves upon that powerfully sustaining fluid, on the bosom of which, but from unwarrantable fear, thousands that have annually been drowned, might have ridden in safety. The dog is the quadruped which we most frequently see in the water, and we well know with what readiness and apparent pleasure some varieties of the race leap off upon its surface, straightway aiming for the opposite shore, or making sundry evolutions in the water, and feeling its ability to support them, they seize upon heavy bodies and bear them safely to the land. The dog, ordinarily, does not lie very high upon the water, but he is expert with his limbs, and

his courage and confidence no more forsake him than on the land. Among the other domestic animals, neat cattle swim with much ease, considering their great weight, and with less immersion than, from a consideration of their frequently ponderous horns and compact bodies, we should be inclined, *a priori*, to suppose; even when vast herds, consisting of many hundreds, on their way to market, are driven in thick succession into a wide river, and swim in the closest community, there is seldom, or almost never an instance among them of drowning; indeed, this very circumstance of being pressed in a crowd may inspire each individual with additional confidence, and a sort of emulation more than sufficient to balance the serious inconvenience and impediment arising from the frequent contact and severe attrition of their limbs and bodies. Swine make their way, floating quietly in the stream, as they are compelled, in immense crowds, to cross it for the market, but are said to suffer sometimes from abrasion, or even laceration of the throat, by the action of their fore feet. Sheep are not bad navigators when once they have in view a fixed purpose and are well set out, but this is only when they have lately been shorn, for though they would not be specifically heavier in their fleece, their form and magnitude could not but embarrass their motion and diminish their speed. Excepting a very small number, all animals—the innumerable aerial races together with the equally countless tribes which roam the earth's surface—may, in a living state, be presumed to be specifically lighter than water, and consequently, if not too greatly incommoded by an inunctuous or other ill adapted exterior, would, were they to make propulsive efforts in a right direction, generally escape safely to the shore. Squirrels swim admirably, and have been known in vast numbers to cross over the Ohio river.

Of all the domesticated animals, the horse is the most noble and useful in the water; he swims with less apparent ease than the cow or the dog, which use each fore and each hind leg alternately, and by which sort of action their bodies are made to pass very smoothly along, dividing the yielding mass, and consequently occasioning only a slight commotion, scarcely inconvenient. The horse plunges—drives ahead with strong action of every muscle—striking forward both fore legs at once, and in the next instant both hind ones, he rises high and falls with each alternate stroke and interval, whilst his wide nostrils yet more expand as the air enters and fills his capacious chest; he respires with labor, his full eye glows with anxiety and resolution, and his surges agitate the water into waves all around him. Sooner or later he must tire under the influence of such powerful and incessant action, and if it be continued, become exhausted; but he will endure a long time, carrying a man with his baggage, and harness on his back, contending with waves and current, and safely transport the whole across a wide river to the shore. And why does not the noble animal quail amidst these labors and yield to discouragement, and drown? The land is in his eye, and though not at home on the water, he is fearless of its depth.

The deer is an expert swimmer, most readily launching off upon the water and moving onward with a fleetness that he hopes will secure him from the grasp of his savage pursuer.

Every one who reflects but for a moment on the relation which a large proportion of the great mass of human beings sustain to deep water, from the profound ocean down to the diminutive extent and depth of a mill pond or the little basin in a rivulet, and knows anything of the immense loss of life by drowning, will perceive that the ability to swim and calmly rest upon the water is a desideratum of incalculable moment. A small part only of mankind have ever learned to sustain themselves upon an element on which they are so often exposed, and which daily and hourly over all its vast expansion into navigable ways, they more and more numerously and thickly throng; nor have all who, to some extent, have acquired the art of swimming, that confidence in the integrity of the water, and that degree of self-possession which must ever be essential to the comfort and safety of all who, by any means, are induced to adventure, or are cast upon its bosom. Finding himself in the water without auxiliary support, the inexperienced adventurer thinks first perturbedly of its depth; he cannot readily seize on any floating material, and he forgets, or never thought seriously of the strong sustaining power of the element in which he is immerged, and which at that moment is actually buoying him up, and would, were he deeply immersed, in all probability, faith-

ful to an unchangeable law, bring him quickly to its surface; no, though it closely embraces him on every side, he has no confidence, for he feels it displaced by every motion, and yielding, apparently, to his entire bulk; terrified, he struggles impulsively with every muscle, looks despairingly to the shore if it be distant, and around him with unspeakable anxiety, and in the hurry and tumult of his thoughts thronged with painful images, he thrusts his arms above his head as if to lay hold on the air, and sinks himself down by their superincumbent weight. He has never known, or in the midst of terror and consternation, he cannot consider that his body is specifically lighter than water, or that even if it were not, a mere gentle motion of the hands and arms directed in a proper manner, and with so great moderation as scarcely to tire, would fully enable him to keep his mouth and nostrils above its surface and preserve him safely for successive hours. Truly it requires no more than a very feeble action of the right kind, and patiently continued, if at the same time the mind be composed and confiding, to keep any person from sinking even in water of the greatest levity. If he desire only to keep afloat, without trying to progress, it will be sufficient to employ his upper limbs in an easy, paddling motion, never bringing them quite to the surface, and taking care to flex his arms a little, and cut the water by turning the hands edgewise as they obliquely ascend along in front of the body to be swept with the palms prone and the fingers in contact, forward and outward and forcibly downward, to be again raised and carried around downward as before. Even a much slighter action than this would be adequate to keep comfortably any one's head above water, if he had no incumbrance to contend with, as his pockets filled with metallic money or other ponderous article to bear him down. There is reason to believe that the cause of the drowning of an unfortunate foreigner in the harbor of Erie, some years ago, was the presence of a large amount of gold coin contained principally in a girdle encircling his waist, and notwithstanding which, he kept for some time above water, but sank ere assistance could be obtained. The fact that if we dive even deeply into the water, we find ourselves soon rapidly ascending to the surface, shows the living body to be naturally buoyant; so, if we lie down quietly on our back, though it be on the bosom of a strong current, we rest as on the softest bed, and float uninterruptedly along till a ripple or a wave warns us to close the avenues to the lungs, and perhaps, turn over with our face toward the water. How often have we seen adults and very children run along an elevated platform and leap down from its extremity some fifteen feet into deep water, feet foremost, their arms by their sides, and their whole form erect as a column, rise resilient from the depth, with a force that brought their entire heads and necks and shoulders above its surface.

A very important point to be observed in floating and swimming, is so to manage the respiration as never to suffer the lungs to be entirely exhausted of air, and in general, whilst the chest is made freely and largely to expand at each inspiration, the air should be a moment or two retained, and somewhat slowly expired; by this means the trunk is enlarged and in the like proportion its specific gravity diminished.

A striking instance of development of the natant faculty was related to me while on my way to New York several years ago, as having occurred in the person of a little boy who, while descending the Hudson in company with his mother, fell in the course of the evening from some part of the vessel into the river, and for a short time was not missed. To describe the anguish of the parent, when after a faithful search of every part of the boat the fact was ascertained, need not be attempted. It was night, and the little sufferer, far distant in the rear of the rapid steamer, was believed to be sunk and irrecoverably lost. With the return of morning the vessel reached New York, and the deeply sorrowing parent went to her home not doubting that her child was lifeless, and deep buried in the waters of the river. But all her sorrow was in a few hours to cease; the little boy was brought to her in the course of the day, safe and sound; he had floated all night upon the water, and in the morning was discovered and taken up by a passing vessel and brought immediately to the city. His account of the transaction was this: As he fell into the river, his first thoughts were, he said, that to be safe he must be quiet, avoiding all unnecessary action and perturbation, as calculated to exhaust the strength and increase the danger; all of which was suggested to his mind by

the recollection at that perilous moment of what he had formerly been told; and summoning to his aid all the courage and fortitude he could command, he decided upon the single object of keeping himself afloat until morning, in the hope that then, as actually occurred, he would be seen and picked up.

In this remarkable instance of preservation we perceive what, under Providence, were the principal means; the strong confidence of the boy in his ability to remain long on the surface of the water, produced by the conversation to which we have referred, and confirmed and continued by his own sensible experience of the fact, with admirable fortitude and endurance. Had the darkness, the loneliness, the extent of water, and its yawning depth, been regarded with overpowering terror, how soon and how surely might a few fruitless and ill-directed struggles have produced a fatal strangulation?

Enough has been said, I hope, to make it plain that any person who will not suffer himself to be very greatly discomposed can keep afloat at the surface of the water until, under all ordinary circumstances, relief can be obtained. Thus far, and an invaluable attainment would be made; the many thousands who are annually cast upon the water, and who sink before boats or other means of safety can be provided, would be preserved to gladden the hearts of their friends, and to number to themselves years of enjoyment and usefulness. It may be objected that the art of swimming, since the common life-preserver and the various other buoyant India-rubber forms contrived for the same purpose have been introduced, is less necessary than formerly, or next to useless. There might be some force in such an objection, if people, when they are likely to be exposed on the water, would always be careful to take with them one of these articles, and apply it on the approach of danger; but it is well known what a strange backwardness there is to do this, even in those who would expect to sink the moment they should touch the water. This disregard of so sure a means of preserving the body above water is unwise and wrong in the experienced swimmer; what, then, is it in the person who believes that, unassisted, he could not keep afloat during the shortest portion of time!

Therefore, it is most evident that mankind require to be admonished, and that an earnest appeal to their understanding now and then be made, with a thrust at their moral sensibility. All these might awaken a general feeling of interest in the subject, and fill our innumerable vessels and the pockets of travelers with defences against the dangers of the deep.

After all, we are too well acquainted, we think, with the character of man, and the nature of those impulses by which for the most part he is governed, to believe that any means for preserving the life of persons incidentally cast upon the water, except such as have their existence, like the knowledge of the mechanic arts, in the individual himself, are ever to be universally or even generally adopted. Means that are merely extrinsic, however well adapted to accomplish the object intended, will appear to be onerous, and the continuation of their use as a sort of voluntary slavery. Whereas, a knowledge of the art of swimming, especially if acquired in early life, unites itself with the very being, and becomes an essential part of its nature, an integer in the sum of the constitution, that will admit of no separation. Always present, it is ready to afford protection on the approach of danger, and however sudden and unexpected the emergency, its possessor will ever find it at hand.

Hitherto our attention has been chiefly directed to the natural buoyancy of the living body, and the necessity and practicability of duly preserving in all cases of difficulty and danger a supernatant state. And we take a high degree of pleasure in the belief that every human being of ordinary form, whose powers have been even but partially improved, is able, in a condition of tolerable composure, to remain for hours at the surface of the water, if it be tranquil, or but slightly ruffled.

In thus calling attention to the subject of self-sustentation upon the water, and ardently pressing its importance, I have not in the least lost sight of the solemn duty resting on the entire community, but with heavier responsibility on the masters and owners of passenger vessels, to provide for and encourage the use of some or all of those exterior instruments and contrivances so often found effectual in preserving life amidst the perils of the deep; but it is hardly necessary to repeat the fact that these all have been and still are very partial in their operation, having saved only a few, a small

proportion of the vast number which have been exposed, from a fatal submersion!

Planks, empty casks and boxes, fragments of wrecks, spars, cotton bales, and boats, have saved thousands who else must have perished; but the millions — where are they?—the millions thrown by some contingency into the water without these friendly aids, and who, too, had never learned to swim? Yes, and all this frightful ruin, when ages ago the soldiers of Cæsar crossed, with bladders under their arms, the rivers of Spain; when the hardy seamen of the Baltic, clothed with an inflated sheepskin vest, buffeted the billows, and lay unperturbed on that stormy sea; when years of reflection have given time for vast improvements, among which are a variety of gum-elastic fabrics, beds, bags, etc., to serve as life-preservers in the water.

But, to resume, believing as I do that the faculty of swimming was given by the Creator to mankind, in common with the inferior animals, for good and useful purposes, I am naturally led to the conclusion that He intended this faculty should be developed, not only in a few individuals of our species, but in all, in every one of the race. This may be argued from the universality of the faculty in brute animals, and the impulses which lead them to its exercise, without previous training, in the moment of necessity. Instinctively they lie upon the water, and throw abroad their limbs in the most natural manner to accomplish their object, whether that be to attain to an adjacent shore, or the indulgence of a native propensity for being in the water, and moving themselves at pleasure. There being a few animals that from their very nature and form are unadapted, and have a dislike to the water, and therefore, if practicable, always avoid it, is no barrier against the general argument, and stands only as a seeming exception; for these creatures, as the hen, the cat, and others, and particularly many of the insect tribes, though they are averse to going into the water, lie safely for a time, and readily make exertions to get off it, or obtain a place of safety, their ill-suited superfices occasioning at once some embarrassment, and unless seasonable efforts are made to escape, would contribute to involve them in destruction; but these, I said, were exceptions rather imaginary than real.

Every creature, then, or almost every creature, has the faculty of floating or swimming, for a time at least, on the water. The development of this faculty in the irrational creature is understood to be instinctive, and therefore neither requires nor admits of any considerable degree of regular training; they inherit it as they do other instincts, and owe but little to instruction. Not so with man, if we except the short period of infancy anterior to the dawn of reason; the human being, though able at once, perhaps, to rest on the water, and move forward clumsily, cannot expect to arrive at a degree of excellence, and become an expert swimmer, without suitable instruction or a somewhat prolonged experience; and however proper and whatever may be the amount of the former, the latter is, for several reasons, essentially necessary. The well-instructed but inexperienced learner may not lie altogether easy, nor feel so full a measure of confidence and composure in relation to the sustaining power of the water, as is always desirable, nor will the limbs be moved with the agility, strength, or grace that, without much fatigue, will insure a fleet, uniform, and continued progress. Nothing short of the tact and confidence gained by long experience could have nerved Lord Byron to encounter the Hellespont, and swim entirely across to the opposite shore.

A similar confidence has sustained the expert swimmer in all ages and countries. Several years since, an adventurous young man swam twice across the Niagara river, without resting upon anything except the water. The place of crossing was just below the cataract. Not long ago, a thrilling incident was published in the papers, relating to the courageous procedure of a young lady who, learning that in a paroxysm of insanity a man had thrown his two young children into the sea and jumped in after them, without being able to swim, sprang from the deck of the vessel, and, seizing both children, kept them above water until assistance was afforded; the man also being saved by seasonable interposition.

Everybody is acquainted with the natant character of the Sandwich Islanders, and would hardly be surprised at any enterprise they might perform upon the water; one, however, which I will introduce here from memory, is not a little remarkable. Some years ago a vessel, having on board a number of these people who had recently been converted to Christianity, was by some

means suddenly disabled, being at a distance of several miles from land, when they were all at once cast upon the broad bosom of the deep. In this forlorn situation, around them the wide ocean, their homes distant—perhaps situated on several different islands, and scarcely within their sensible horizon—they saw no prospect of escaping from their perilous position but by swimming; and drawing near together, men and women, they all engaged in a social, solemn act of Divine worship, commending each other to God and imploring His protection and aid for their safe return to their respective homes. Among the interesting group, now to separate, were a man and his wife, the latter taking with her a bucket, lest in the voyage her declining strength should require some extrinsic support. Having shaped their course, the waters, buoying up their bodies, parted before them at every stroke of their well-practiced limbs, and side by side they had measured, without compass, many long miles of the trackless waste, when the husband, showing signs of sickness or fatigue, received the bucket from the hand of his companion, and thus aided he held on for a time, and hope cheered them with a renewed prospect of success; but clouds lingered in the sky, and a deeper gloom was preparing to settle down upon the devoted pair. Nature was evidently yielding to the strong demand made upon its vitality, and chord after chord slackened in the contest, till the bucket was no longer adequate to the support of the fainting man, and the last resort—a hold upon the long tresses of the unflinching woman—after a few more rods had with unspeakable anxiety been gained, was despairingly relinquished, and the dying husband was no more; his spirit had fled, and the deep-stricken, sorrowing widow was left alone, yet far out from the shore, to take a last look at the pale form of her beloved, and leave it to sink to its ocean grave, while she made the best of her way towards the island, suffering, doubtless, by this time, from fatigue and hunger, and without further interruption, in due time landed safely on its shore.

To multiply instances of this kind to illustrate the extent and character of the natant faculty, and the practicability of its development and vast utility, would not be in the least unpleasant to me; but when we think of the ease with which they may be looked up in books and papers, if not already stored away in the memory, I might forbear, and proceed to the consideration of the closing paragraphs. I stop, however, a moment, to remark that, as some persons may think the subject in no danger of being exhausted, and that the chief object of this paper—the awakening of a general attention to the great importance and practicability of rendering the cultivation of the art of swimming universal—should be pressed upon the community by illustrative cases, as the most promising method of success, I will venture to add that the practice of divers for sponge, coral, and other productions of the class zoophytes, in all those seas where they abound, and the universal prevalence of the practice of swimming among the islanders of the Pacific, is becoming more and more a theme of thought and conversation; writings on the subject are accessible, and no one who has heard of it would be likely to forget the feat of two of these islanders, converts to Christianity, in exploring, by the help of a rope, a ship's bottom, to ascertain the condition of her copper; nor the adventure of him who, being attacked by a shark, first fled from him, and afterwards, better prepared, sprang into the sea and commenced an offensive battle, with no better defence than several plies of a strong, tough tegument about his arms, and no weapon but his hands, endeavoring at one time, by thrusting his hand into his mouth to tear out his tongue, and at another to direct him out of his depth upon the strand, by seizing him by the tail, and so dextrously managing it amidst its strong and slippery vibrations as to keep his head toward the shore.

In the forepart of my Essay a cursory view was taken of the action of several sorts of animals in the water, intending thereby to illustrate with greater clearness and precision the true relative position sustained by man with the inferior creatures, in comparison of their natant powers. This has, then, already been seen in the course of this discussion, but it must be more fully and distinctly considered in the sequel. One of the chief reasons why brute animals are much less often drowned than the human species is the absence of that strong consciousness of danger which the former, from their very constitution, are not capacitated to receive. The brute may be filled with terror, but experience shows it is impulsive;

it has little of reflection, and nothing to do with the future; it is the present wholly which gives him trouble; if he is crossing a river, his attention is somewhat attracted by the opposite shore, not to awaken a sense of pain, but of pleasure; he feels, if he has been long in the exercise, discomfort from weariness, and anxiously pulls for the land where he expects to have rest. He knows nothing of the fearful depth beneath him, and cares as little as he knows; if he cannot by extending them touch his feet upon the bottom, it is all the same whether it be a foot or fathom. He has no friends to think of leaving, no work to remain undone, no sins to repent of. All his painful sensations seem evidently to arise from his unnatural situation, being off his feet, and on an element to which he is not used, or only in a limited degree.

Man, on the contrary, even at a very tender age, is thronged, when in danger, with reflections and fearful forebodings. The little girl or boy of seven or nine years old, and having common capacities, is probably not to be found, who, on being cast upon the water, would not think of its deepness, the danger of sinking, drowning, dying, and what his or her parents, brothers, sisters might think, feel, or say; and not knowing how to sustain the body by appropriate motions of the limbs, would suffer it to go down, by raising the hands above the head, or some other improper movement, causing water to rush to the throat, spasmodically closing the glottis, and beginning the fatal process of strangulation. These or other painful trains of thought being irregular, hurried, and interrupted, suspend the operations of reason and judgment, even in the adult; and so the very powers by all of which man is rendered superior to the brute, and which should direct him with greater certainty to the means of safety, are subverted into a wild chaos of mind, and become engines of destruction. From these considerations then, the inference seems fair that in the lower animals safety is promoted by a general absence of all real apprehension of peril, whilst it is diminished in the human being as the sense of peril is increased, and the intellect confused and distracted. I have said that one of the chief reasons, *cæteris paribus*, why brute animals are much more seldom drowned than man, is an absence of a strong consciousness of danger. This reason, however, can properly apply only to persons who have passed the period of infancy, and through fear are rendered incapable of determining what sort of action will keep them afloat, and carry them forward on the water. Yet it must be remembered that infants, whilst they cannot exercise reason, have a very inferior instinct to brute animals, even in the incipiency of their existence, and, therefore, under equal circumstances of danger in other respects, they would have, viz., the young of brute animals, almost the entire advantage, the infant child being almost sure to strangle as soon as the first ripple had dashed over its face. Here is an amusing account from the earlier memoirs of an old friend. Mr. James Samson, an Englishman, with whom I have long been acquainted, and in whose word I have entire confidence, relates an incident of his early childhood thus. He was taken to the bank of a river by some young men, and set down upon the ground while they undressed and went into the water to bathe and swim. For a short time he remained quiet, but very attentive to what was going on; pleased with the exercises and play of the young men, and under the influence of a strong desire to imitate the swimmers, he stripped off his clothes, and in a moment sprang from the edge of the bank into the river which was slightly depressed below the shore, deep and perfectly quiet. He was full of glee, and without the least embarrassment swam like a duck. The young men were surprised, and fearing that he might drown, caught and bore him to the shore, and spanked him for his presumptuous adventure; but they had scarcely more than returned to their pastime, when the little fellow jumped again into the river, and swam as before; and this time he was allowed to remain in the water until he was satisfied to come out along with his friends.

Dr. William Johns, of Erie, Pa., my intimate friend, once took a little son of his to the lake on which this place is situated, and wading into it to where the water had considerable depth, threw him to a distance off upon it, and stooping, stood in an inviting attitude, while his little boy swam without difficulty to his outstretched arms. This latter account, though not so striking as that of young Samson, is a good illustration of the natant faculty in the young child.

Another reason why, *cæteris paribus*, some of the irrational animals are safer in

the water than man, is that their structure and form being fitted for a higher position, one of less immersion, enable them to keep their mouth and nostrils, perhaps their whole head, at a more considerable and convenient elevation; such are the deer, and other animals of the same genus, and those in general which have large, full chests, and slender limbs; not to speak of the numerous aquatic birds, whose every part the Creator has admirably adapted to the element on which they love to sail, and on which they are equally as safe as on the land. The peculiarities in the figure and construction of these birds are very remarkable, and exhibit the nicest adaptation imaginable to their manner of life, the osseous portion of their bodies being comparatively light and hollow, and the whole of the framework open and slender, with great capacity, but a slighter filling up than in land animals; all which, with dorsal pulmonary spaces and large exsanguine pectoral muscles, fit them for both swimming and flying.

Having freely assigned to the inferior animals all those advantages which they naturally possess, as connected with the water, and which we have seen are so complete and ample that in ordinary circumstances strangulation is rare, we turn again to man, that we may in a more extended view contemplate his superiority in the amplitude of the natant power so kindly bestowed by our Creator, and demanding our grateful thanks, and which power, as a sacred duty to Him, we are bound, we believe, to develop and improve.

The very thing, we have said, which, misused, diminishes our safety on the water, very greatly promotes it when properly employed. It is the understanding which gives this superiority to man. If rightly used, it will keep him out of danger, or it will come to his aid, and in the midst of peril, secure his safety. During the calm exercise of the understanding, if he be cast into deep water, he will consider what is the best method to be pursued; whether to remain quietly afloat until assistance can reach him, or swim for some object that will sustain him for the present, or directly for the shore; he will not waste his strength in useless exertions and perish with exhaustion; he will swim as he can bear it, and make every stroke of his limbs tell on the distance, and if this be great, he will not refuse to receive support from any buoyant object he may command, and to relieve himself of fatigue, if but only a beginner in the art, he will change his mode of action, sometimes operating on his back, at others on his side; he will swim head foremost or feet foremost, or he may choose to lie still for a while, and these changes he may repeat at pleasure.

In all these respects man has an advantage over the inferior animals, all of which, as far as we know, have but one mode of action in swimming. Thus, we infer, if the mind be calm and unperturbed, man or woman, in all ordinary circumstances, has the power to preserve his or her life upon the water independent of any auxiliary support. It has been objected that, to render the art of swimming universal or even to bring it within the possession of but a majority of mankind, must be attended with extreme difficulty. That some difficulty might arise from the great aversion of some and the indolent indifference of others, we have no doubt. There are those, certainly, who would plead that there is danger in learning the art, not a few being drowned in the process, and more, perhaps, afterwards. We are aware of the force of these objections, and yet do not hesitate to believe that, like the spectres of early dawn, they are to be dissipated by the first clear rays of full risen light. Especially may it appear difficult and hazardous to teach infants and young children this adventurous art; that during the apprenticeship, through the mismanagement of nurses or other incompetent instructors, and afterwards from carelessness, presumption, or other incidental circumstances occurring as a natural consequence of the very power and ability to swim, drowning would be frequent. This does not necessarily follow as a result of the art; that even good swimmers are sometimes rash and venturesome is certainly true, and in consequence of indulging such a spirit, have got themselves into difficulty and been drowned, when, if ignorant of the art, they would have stayed on terra firma and been safe. And, melancholy to think, instances are not wanting in which the practiced swimmer has perished in his exertions to rescue those who could not swim; he has been embarrassed, entangled, and in full strength carried down, or having saved the helpless and dependent, has at length himself sunk down from weariness and exhaus-

tion. Objections to the general introduction of this art, as if it were of difficult attainment, are anticipated as likely to come from the indolent and the indifferent, and persons unaware of the positive aptitude to its acquirement. And how often the first aspiration, the slightest expression of a wish has been instantly rebuked, if not extinguished, by "keep away from the water, or you will be drowned, my dear," from the lips of an affectionate but mistaken parent. Lastly, that it may linger long in the memory, we would call attention to some of the objections that have operated so effectually and so fatally in respect to the fairer portion of our race. Women, with few exceptions, are, in a civilized community, unacquainted with the art of swimming, so that if thrown upon deep water by any means whatever, they have little or no hope of being rescued from the perils of their situation excepting by the hand of some person who, having previously learned how to swim, is able to support both himself and another.

This is a great evil, and many perish annually on account of its too general prevalence. A dream of inability has kept up the illusion, and little girls have been allowed to grow up to womanhood without the most remote expectation of being able, unassisted, to support their heads above water for a single moment. They have never been instructed, and their first thought is that they must sink inevitably if left to themselves, and as a matter of course, they do. Now all this is sad, and yet more so when we consider how often they carry with them to the bottom those who, had they attended only to themselves, would have safely escaped. On this state of things we look with no little concern, yet we cannot hope for much improvement so long as the objections arising from a perverted taste and from wrong views of what is decent and becoming in the sex continue to be urged as seriously, and as pertinaciously adhered to, as if it were really sinful for women to swim. So it is that by universal consent women are so generally helpless in the water.

Every reflecting person must sincerely regret this state of things, and condemn a conceit so destructive of life, and that cruelly denies to the young female an acquisition which, in common with the other sex, her impulses lead her to desire.

We will now endeavor to answer in consecutive order the objections which have been presented, and we cannot but hope that, like as the delusive shadows of twilight flee on the rising of the sun, the whole will vanish at the approach of reason.

It is conceived that to render the practice of swimming general, those persons already convinced of its utility should, by every accessible means, communicate their knowledge to others; and it would seem proper that the first efforts should without delay commence with the members of the Medical Profession, and under their safe and enlightened influence be diffused abroad on every hand, informing the ignorant and arousing the indolent and indifferent. Especially should it be recommended by all the members of the profession to the parents of all children within the district or circle of their practice, to commence with a course of discipline such as the Medical Societies might adopt as most eligible, at as early a period as possible, at least with all infants before the expiration of the first five years of their existence. The first attempts may be made under the agency of the parents or a careful and sensible nurse, in a large tub, trough, vat or tank, and any of these may be exchanged for a little pond, or basin in a brook. All danger of strangulation, and even the slightest inconvenience and discomfort, may most readily be prevented by the care and attention of the person having charge. In respect to larger children and adults, who would require more extended and deeper water, they should not be allowed to venture into it alone, or only in company with other children or inexperienced persons, but should invariably be attended by one good swimmer, who should feel responsible, and should possess the entire control of the pupils. Still further to insure the safety of learners, buoyant bodies that could easily be clung to, and long, slender poles, as the common reed, should be at hand; and the common life-preserver is a most proper attendant. In answering the objection that good swimmers are sometimes presumptuous, venture improperly, and over-tax their powers till they fall a sacrifice to their indiscretion, we maintain that such conduct is not necessary, and therefore should not be introduced as any disparagement to the art. Exhortation, warning, persuasion or advice, may effectually cure the evil. That it is difficult to swim, is entirely a mistake. In children particularly, the aptitude to learn is great

and striking, and few, perhaps, who live convenient to a river, a lake, or the sea, would remain ignorant of the art till the period of adolescence if not restrained and prevented by the false and mistaken kindness of friends; and in the case of adults who cannot swim, we feel well assured that under proper tuition there are scarcely any persons of either sex, even though they may have reached their seventieth year, having no serious adverse peculiarity about them, who could not be taught to float and to move regularly forward on the water in less than half a dozen trials of a quarter of an hour each, with the prospect of improvement according to the pains they might thereafter bestow upon themselves.

This may appear strange and incredible at first thought, yet if we will but look at the fact that the specific gravity of the human being in a living state is somewhat less than that of water, and that progression and at the same time a fuller sustentation is effected by an easy paddling action, the truth will—in theory at least—be manifested.

The objections which have been suffered to lie against the acquirement of the art by women are, as we have said, in bad taste, and originate in wrong views of what is really proper and becoming in their sex. How, we ask, can anything which it is positively useful, and, as we consider it, necessary for a person to know and practice, be indecorous? If learning to swim may sometime or other be the direct or indirect means of preserving her own or another's life, how could a woman fully believing this neglect to learn, yet have an approving conscience? If it be decent to have such a respect for cleanliness of person as to lead her to the bath, or to wash the whole body in clean water, who would say it were more decent never to bathe. Frequent and general bathing is conducive both to health and comfort, and in a civilized state of society can scarcely be comfortably or safely neglected, either in summer or winter. To secure to females every necessary opportunity and facility for learning and for practicing the art of swimming it is only requisite that some conventional rules should be adopted (to which the other sex would undoubtedly most readily assent), and places appropriate, and suitable times and conveniences for the purpose would soon sufficiently abound. We speak, t will be perceived, of females that have passed the period of infancy; for anterior to that period no difficulty could exist, and it is in that early season that the opportunity should be provided, and the proper efforts made for development and incipient improvement of the natant faculty; at this period, instinct will operate and assist in fixing the whole more deeply in the constitution. And at this tender age, too, the advantages of a greater convenience conspires to fix the best period for commencing the work.

Having, as we think, disposed of objections, and opened the way to a more correct appreciation of our subject, we feel no small degree of pleasure whilst we proceed, in conclusion, modestly to express our belief that all persons, as far as practicable, should learn how to float and swim calmly upon the water; that by far the best period of life for the acquirement of this power is infancy but that no person who may be desirous of its attainment need be discouraged on account of age. We repeat that it is neither necessary nor useful to expose the child to peril while it is learning, either by leaving it unprotected, or by taking it into deep or rapid water. Nor would we recommend that promiscuous groups of little children as is sometimes the case now, should be suffered to rush into the water by themselves alone, and as caprice may impel them, but only under the control and guidance of a competent instructor.

In general the child should be instructed at home, and learn its first lessons from its parents or nurse, or other person, in the domestic circle; and it will often happen, as we have said, that a large tub, a tank, or a little pond made by damming up a brook will constitute the first place of trial, and nothing better could be desired, if only it be deep enough to immerse the child to its neck. It seems very desirable that the mind in after years should never be able to revert to the period when the little being was ignorant of the art. To produce this oblivion the work must be commenced, at least, before the fourth or fifth year, and the child well familiarized to the water in an extended form, as a large pond or river; thus having no remembrance of the time when he could not swim, it seems fair to conclude that he would suffer little or nothing from the fear and perturbation of mind that seize and operate so fatally on the inexperienced, and sometime

n the initiated. On many occasions it would be greatly convenient and proper to ut on a swimming dress similar to that orn of late years by sea-bathers, when both exes mingle freely in the recreation and astime of wading, plunging, and swimming, and all with the strictest regard to odesty and decorum. It is well to mention the effect of a little oil of some kind ubbed over the skin in preventing the inuation of water by the pores, the rapid scape of vital heat, and that general thickning and corrugation of the cuticle, comon after long-continued immersion, wholly uspending the function of perspiration, and ot unfrequently inducing some degree of ever or other indisposition.

Finally, believing that but few men are ware of the fact that after persons have trangled and sunk to the bottom, and lie quiet there, they are able to see around hem, and sometimes, if not usually, retain heir senses, and could they command sufficient strength and resolution, might give ome token by which a search for them would be more immediately successful, or hey might extricate themselves, peradventure, by using the power that, under such circumstances, may still linger in the locomotive muscles, we will relate an incident n illustration of this point:—

More than fifty years ago, Col. Nial Nye, hen a lad, went into the Muskingum River, n the state of Ohio, to bathe. No one accompanied him, but an elder brother was at work in a field within the reach of his voice. The inclination of the river's bottom was such that, at no great distance from the shore, the depth of water exceeded his own height. Ere long, some embarrassment occurring, Nye sunk to the bottom and arose to the surface alternately, until on the third submersion he lay still and quiet upon the bed of the stream, perfectly sensible, but despairing of relief, inasmuch as he was aware that he had suffered the fatal third descent. However, he was not then to perish. Suddenly, a thought sprang up in his mind that it was unwise to lie there and die, when the shore was so near, and instantly rallying every particle of his fast failing energy, he threw himself over upon his hands and knees, and crawled to the edge of the river, where raising his head above the surface, he for the first time became unconscious, and dropping his face into a few inches' depth of water would after all have drowned, had not his brother, who had heard his cries, hurried to the spot, and arrived just in time to reclaim him from the destructive element; after which a few minutes only sufficed to bring back his senses. Of the truth of this statement I am well assured, having been long and intimately acquainted with Col. Nye as a gentleman of the strictest probity, and having received the same from his own lips.

Considering this entire subject, it appears to us very manifest that in almost all ordinary cases a person who has received a knowledge of only the first principles of the art, as, viz., that the human body is specifically a little lighter than water, and that the most natural paddling motion of the limbs will both raise it higher and carry it forward, enabling the swimmer freely to respire the air, may and can, if such a person be able to exercise reason, preserve him from drowning. Extraordinary cases will occur, however, and such are a low and freezing temperature of the water, impeding the circulation and chilling the whole body, inducing spasms or inflexibility of the limbs; such also are impracticable distance, and insuperable weariness and exhaustion from long-continued and overtaxing labor.

As a hygienous measure, too much cannot be said in favor of swimming. It gives exercise to every muscle of the body in general, without undue fatigue, promoting digestion and assimilation, exhilarating the spirits, and causing the decernent and excernent systems to act in a salutary and efficient manner for the promotion of health; and there is no species of exercise which tends more certainly to the development of the entire muscular structure. If children and youth were more constantly to engage in the exercise of swimming, there would, in all probability, be fewer instances of contracted thorax, and less of pulmonary obstruction, and the dreaded and fatal phthisis. The muscles, expanding in volume and increasing in energy, would solicit an expansion of the osseous framework, increasing the capacity of the pulmonary arches, and inviting into the lungs at each inspiration a fuller and freer draught of air. This would supply the blood with an abundance of the vivifying material for carrying on a more perfect animalization, resulting in a general freedom from all visceral disorder and nervous irregularities, and thus securing a high state of health and comfort.

In saying that the exercise of swimming is promotive of muscular development, and, through this, of a more perfect animalization, it will be perceived that we do little more than to place it in the list of gymnastic exercises, though it is evidently at the head of these, and has the additional merit of associating with it the bath, than which there is no single means more powerfully hygienic, and at the same time more agreeable. We feel happy in addressing, as we fully believe we do, the good sense of our medical brethren, who, from their knowledge of the philosophy of man, can best appreciate our subject, especially in its hygienic aspect, and who, if the art of swimming is ever to be universally practiced, will be found, we trust, to have been its chief promoters and patrons.

Omitting to insert in its proper place the following paragraph, I will, as an important item, put it here at the close of the essay:—

Let any one who doubts the sustaining power of water be led into it until he is immersed in it to the chin, and he will find that he is unable to stand steadily upon the ground at the bottom, and scarcely more than touch it with his feet; and if his guide were now to desert him, he would have to fall down on the water for support. This is a convincing proof of the truth of the principle everywhere contended for in this paper, and, perhaps, ought to constitute the first lesson to be learned by the uninitiated reflecting mind.

ORIGINAL OBSERVATIONS AND EXPERIMENTS WITH HYDRATE OF CHLORAL.

By Laurence Turnbull, M. D.,
Of Philadelphia.

(*Concluded from No. 808.*)

Experiment Thirteenth.—Frank N., aged 21 years, of strumous tubercular habit, laboring under an attack of congestion of the lungs, with the pleura involved, pain very intense, respiration hurried, temperature 104, pulse 120; directed a blister and fifty grains (gr. l) of hydrate of chloral in two doses. His mother, in her desire to relieve him, gave it at one dose. The effect was good, and his sleep profound; skin so cool and clammy that she became alarmed and woke him suddenly; yet, when he was thus awakened he was not confused, was able to answer all questions directed to him, and was entirely free from pain, with free expectoration, and breathing much relieved.

Experiment Fourteenth.—It is a most valuable agent in severe affections of the nervous system.

The mother of the above lad, aged 45, had a most severe shock to her nervous system, owing to the sudden and terrible loss of two of her boys, aged respectively 10 and 11 years, by drowning, which was followed, in her case, by nervous fever, with delirium and insomnia, and unwillingness to take a particle of food for twenty-four hours. By prescribing and administering equal parts of syrup of chloral (ʒj.) and fluid extract of valerian, with beef essence as food, she finally obtained sleep and recovered her reason, and was ultimately restored to good health. This will partially account for the large dose she gave her son, having such faith in it herself. But in all diseases of the heart and lungs great care must be employed to commence with small doses, or to combine the chloral with a small quantity of morphine, or tincture of Indian hemp.

Experiment Fourteenth.—Miss J. W., aged 18, with ophthalmitis and destruction of the eye, with pain and distress, was relieved by three thirty-grain doses of hydrate of chloral, and was able to sleep.

J. W., aged 52, father of the above, had his right eye penetrated by a percussion cap, July 4, 1871, and had been under the care of a homœopathic physician for treatment before coming to the hospital. He was pale, nervous, and in great agony, with entire loss of vision. The eye was removed, and thirty-grain doses of hydrate of chloral kept him free from pain. The only other means employed was the use of the ice-bag. It is very useful in some forms of eye diseases of a strumous or neuralgic character, associated with quiniæ sulphas, but not in other forms.

Experiment Fifteenth.—Heat—Toxæmia, Thermic Fever.—G. C., aged 22, male, a resident of Mexico, while on a visit to Darby, July 13, 1871, had to walk a mile and a half in the broiling sun; was overcome, and obliged to retire to the shade, and was unable to proceed. Since which time he has had constant pain in the head, with heat of skin and insomnia almost complete. Reasoning on the former experiments of the cooling influence of chloral, and its effects upon the nervous system, I ordered him ten-grain doses every three hours, in water, with ice to his head. After using it six

hours he was able to sleep four hours; arose and took some nourishment; he was free from pain in his head, and his skin reduced to 90. Took the chloral again at 11 P. M., and had a good, quiet sleep until 7 A. M.

In some few instances the chloral will disturb and distress the stomach, say in about three per cent. of the cases, but if incorporated with a portion of mucilage it is rapidly absorbed. If given by the rectum, at the rate of double the quantity required by the mouth, it will in some instances produce swelling of the eyelids, and even cause intoxication and dimness of vision.

In cases of chorea, epilepsy, and convulsions, arising from irritated nervous or reflex spinal irritation, it can be given with advantage alone, or in combination with the bromide of potassium or tincture of hyoscyamus. In acute mania, simple or puerperal, it is more valuable than Indian hemp, or bromide of potassium, or morphia, as numerous cases have demonstrated.

Experiment Sixteenth.— Case of acute mania treated by cold, sedatives, morphia, etc., without inducing sleep, accomplished by the use of hydrate of chloral. Mrs. Letitia B., aged 49. Sept. 13, 1871. Has been suffering with acute mania for ten days, without any known cause except distress in regard to her rent. When I visited her she was in bed, with a wild expression, pupils dilated; her hands were tied to prevent her from destroying everything she could get hold of; talk incoherent and rambling; refused all food, which had to be administered by force; had not slept, except a few hours, for ten days. After trying morphiæ sulphas hypodermically, to the extent of one grain, other agents having been employed previously to my seeing her, hydrate of chloral in ten-grain doses was administered every three hours. She slept the first night for three hours after using thirty grains. She continued its use on the 15th, 16th, 17th, 18th and 19th, sleeping longer each night, and on the morning of the 20th when she awoke she was rational, able to eat some soup, and desired to see her little girl. She also spoke to her sister, who before she would not look at. In corroboration of the above we cite the observations of Dr. A. Holler, attending physician of the Insane Retreat in Klosterneuburg, and Dr. Campbell. Dr. Holler remarks:

1st Case. The hydrochloral, during a period of three and a half months, failed only twice to produce sleep; while, in forty-six days, the exhibition of morphine was followed nine times by a negative result.

2d Case. Catharine B., aged 47 years, suffered from religious melancholy; was greatly troubled night and day with *tinnitus aurium*, causing her to pass entire nights without sleep. The employment of scruple doses of hydrochloral produced several hours of uninterrupted sleep. In the course of time it became necessary to augment the dose to two scruples. Her pulse sank in the meantime to 66, and the quantity of urine (as had already been noticed in other cases) was increased. The disturbance of hearing diminished very decidedly.* Mr. Aldridge examined the eyes with the ophthalmoscope, of patients under the influence of chloral hydrate, and the deductions, if any might fairly be drawn from such a small number of instances, would be that the chloral hydrate increases the calibre of the arteries, and consequently the vascularity of the retina, until such times as the patient falls asleep, and that the anæmic appearances seen at the latter period are those which are said to be characteristic of healthy sleep. This fact was first observed by Dr. Hammond, and published in the New York *Medical Journal*, February, 1870, p. 469.

Dr. John A. Campbell† gives the following results of experiments at Garland Asylum, Carlisle:—

1. That both chloral and tincture of hyoscyamus are sure sedatives to maniacal excitement.

2. That of these two medicines chloral is the most certain sleep-producer.

3. That chloral acts more quickly than tincture of hyoscyamus.

4. That though bromide of potassium, in gr. xc. doses, is a sedative to maniacal excitement, and to a certain extent hypnotic, yet it is not a sufficiently powerful sedative to allay intense excitement, or an hypnotic to compel sleep where great insomnia exists.

5. That a two-drachm dose of tincture of hyoscyamus is not quite equivalent to thirty grains of chloral. Two and a half drachms would probably be as nearly an equivalent as could be given.

Experiment Seventeenth.—In two cases of

* The Journal of Psychological Medicine, April, 1872, pp. 371, 372 and 404.

† Journal of Mental Science, January, 1872. The Practitioner, April, 1872, pp. 255–9.

delirium tremens, one from excessive use of mixed drinks, and one after a severe injury, both instances were relieved, the first by thirty grains of hydrate of chloral, and in the second seventy-five grains were ordered, which gave the patient a quiet night, with no delirium, and the case did ultimately well.

A third case of the above disease was treated with equally good results, but its use had to be discontinued, owing to so copious a flow of tears obscuring the vision, etc.

Experiment Eighteenth.—Case of dysmenorrhœa relieved by hydrate of chloral. Miss C. G., aged 31, large frame and stout, has suffered with most distressing and painful menstruation for some time; the pain so severe as almost to produce convulsions; menstrual fluid coming in a gush and then retained. Administered thirty grain doses every three hours, with the most happy results of relieving the spasm, increasing the flow of the fluid and urine, and great relief to the pain. The writer has also used it in inflammation of the ovaries with equally good results.

Toxical effects on the human system:—This drug has been employed in hundreds of thousands of cases by medical men without producing but very few deaths, yet in the hands of persons not in the profession several deaths have followed its indiscriminate use, or rather abuse. According to Dr. B. W. Richardson, the maximum dose is ninety grains, and with one hundred and forty the sleep would be dangerous. Yet deaths have been reported from 60 to 100, or even 45 grains; but as stated before, not ordered by a medical man, except in one or two instances. In recent cases reported by Mr. B. Browning recovery took place after the use of one hundred grains, and as much has been used as seven pounds by one individual in increasing doses, without any very injurious results. See also two cases of death reported in Vol. XXVII, August 17, p. 160, of this Journal; one after four days' use, and one after twelve days, quantity not stated.

Means to be employed in case of accidents in which a fatal dose of chloral has been administered:—First, apply warmth, and keep the air warm. Second, sustain the body by an abundance of food, especially milk, warm, with a little lime water, and stimulants, say half a pint every two or three hours, one or two ounces of brandy or whisky. Third, Keep up artificial respiration by a small double acting bellows or other means. It is useful to add to this, as in Mr. Browning's case, small doses of morphine by the hypodermic method.

Although it is a most useful agent in all convulsive diseases, it will not as a pain reliever always, nor could it, take the place of morphine. It has been found very valuable in causing sleep, and even curing cases of tetanus and trismus. There have been, up to June, 1871, thirty-six cases of tetanus treated by this agent and the galvanic current, in which there has been twenty-one recoveries and fifteen deaths. In one case the dose was sixty grains every half hour, and the patient took seven doses and recovered. It has been found useful in the paralysis of the insane, and yet in some instances it produces a partial paralysis of the organs of deglutition; also restlessness, and even coma.

It is antagonistic to the poisonous effects of Calabar bean and strychnia, and yet is given in combination with them.*

Dr. H. Griffin reports a successful case in 1872 by means of chloral, morphine and galvanism. M. Garnier refers to several cases in which chloral was used in the treatment of tetanus occurring in very young persons; two cases were cured. The writer finds another case of death from chloral, reported by Dr. W. H. Lathrop, occurring in the practice of another physician, in which 100 grains were given; after the last dose of 20 grains the two physicians left the house, when they were called back to find the patient dead. Prior to their leaving it is stated he complained of a slight paralysis in the right lower extremity, which no doubt extended to the heart. A post-mortem examination revealed nothing. This is like one or two fatal cases related by Dr. N. R. Smith, of Baltimore, in which when given in large doses (60 gr.), and where the system may have become charged with it, it overwhelms the powers of life, as is the case in some instances by the hypodermic use of morphine, aconite, strychnia, etc. According to Dr. Richardson's observations it should be given in repeated doses, at the rate of ten grains every two hours, or seven grains every hour; but the pulse, heart and skin should be carefully watched. Dr. Nathan R. Smith describes its effects upon the fingers, attended by desquamation

* See table by Dr. Joseph R. Beck, p. 299, in the St. Louis *Medical and Surgical Journal*, June, 1872.

of the cuticle and superficial ulceration; but so far as our observation goes, and that of many physicians, no such results followed its use, and his cases are exceptions which it will be well to remember as results which may be encountered.

Hydrate of chloral has been found to act beneficially in a number of cases of puerperal convulsions; and Dr. Liebreich is disposed to explain this by accepting Frerich's theory, that the convulsive attacks are connected with the transformations of urea into urate of ammonia, and by supposing that besides the production of chloroform there is a formation of hydrochloric acid, which neutralizes the ammonia. Among other diseases in which there has been a general agreement of opinion as to the beneficial effects of hydrate of chloral, Dr. Liebreich mentions senile nervous asthma, not noticed before in this paper, dental convulsions in children, sea-sickness, etc. The following are our conclusions, as drawn from our experiments, observations, and the most recent literature upon this interesting subject.

1. The action of chloral hydrate differs from that of chloroform.

2. That the action is the result of the conjoined use of chloroform and formic acids upon the blood.

3. A part of the chloroform formed by the action of the alkali of the blood is eliminated by the pulmonary mucous membrane; a part of the formic acid is eliminated by the urine as formiate of soda, as shown by experiments of "Byasson" (French Academy, June 12, 1871).

4. There are three degrees of the operation of chloral on animals and man, as shown by our own experiments.

The first degree is feebly soporific, and slightly nervous sedative action.

The second degree is an intense soporific action, with diminution of sensibility; at this period there is a deep sleep of variable duration, without apparent trouble of the principle functions of life.

The third degree, complete anæsthesia, with total loss of general sensibility and muscular power, cataleptic state. Death almost always follows this degree of action, as was seen in our experiments on animals.

5. Under the microscope the blood was seen moving, with some bright red, or dark red particles. According to "Ralph," starchy bodies are also met with in both urine and blood.

6. Death takes place last at the heart, which is kept in action long after all signs of death in the animal were present, as shown by removing the sternum, etc.

7. Sleep, with diminished heat of the surface one or two degrees below the natural standard.

8. Small doses do not produce anæsthetic results, these requiring from forty to fifty grains. In typhoid and typhus fevers one must commence and continue in small doses; five grains is the average quantity required.

9. It increases the flow of the menstrual fluid.

10. Seventy grains of the hydrate of chloral is equal to ½ grain of morphine employed hypodermically, and is not apt to cause so much disturbance of the stomach.

11. Gout and rheumatism must be treated with an excess of alkali, potassa or soda, to obtain the best results from its use.

12. Males require a larger dose than females.

13. It is very valuable in diseases of little children, but care must be exercised to commence with small doses, gr. j. for each month, and it should be mixed with nothing but water, as it is so apt to change, and become worthless in contact with organic matter.

14. Hydrate of choral will be found useful in phthisis, and even some forms of acute affections of the lungs, but not when the heart is involved.

15. It is a most valuable agent in nervous affections.

16. In affections of the eye it requires care to use it, as it is apt to cause swelling and redness and excessive flow of watery secretions with obscuration of vision.

17. In sunstroke or heat toxæmia it is a most valuable aid to produce sleep in that restless state after reaction produced by frictions of ice and ice-water to the head and body.

18. In tetanus it has been found a most pleasant agent in arresting the fearful paroxysms and giving the patient rest, and assisting materially to the cure, causing a relaxation of the affected muscles, and by counteracting the effects of the spasm.

19. In cases of impending death the means are to support the system by heat, food, and artificial respiration, with stimulation and small doses of strychnia.

20. It has been found a most valuable agent in acute mania and in the paralysis of

the insane, delirium tremens, dysmenorrhœa, and tinnitus aurium.

21. Comparatively, trials prove it more valuable, in maniacal cases, in producing sleep, than tincture of hyoscyamus or bromide of potassium.

22. Chloral is very useful in the convulsions of children (when there is no severe affection of the bronchi, heart or lungs), but care must be employed not to administer it if the infant or child is very anæmic or in an exhausted condition, as in the case of a wasting disease.

23. The necropsy in case of death from hydrate of chloral shows anæmia of the brain, acute edema of the lungs, hyperæmia of the abdominal organs, and dark fluid blood in the vessels.

Editorial Department.

Periscope.

Stromeyer on Conservative Military Surgery.

The eminent German surgeon, Dr. Stromeyer, delivered a lecture in London last May, from which, as reported in the British *Medical Journal*, we make some extracts:

My results of conservative treatment in gun-shot fractured thigh, during the first three campaigns of 1849, 1850, and 1866, did not go beyond 50 per cent. healed. I saw the reasons of our failures, tried to avoid them, and went on with conservative treatment. In the two campaigns of Schleswig-Holstein (1849 and 1850), the patients had to be carried to considerable distances. After the battle of Langensalza, in 1866, I was unable to prevent that many cases were spoiled by an injudicious use of plaster-bandages. It was in Floing, near Sedan, where we succeeded in saving 77 per cent., 27 amongst 35 patients, who had been carried to no great distance, and were treated without putting much restraint on their shattered limbs.

From my own father I had learned the advantages of Percival Pott's position, which may be employed during the first period in most cases; in others or later the doubled inclined plane, or a straight wire basket, will suffice. According to my opinion, the great principles to be followed in compound fractures in general are—(1) dressing the wounds without lifting the limb; (2) avoiding constriction; and (3) not irritating the muscles in straining them by mechanical contrivances. A gun-shot fractured thigh permits a weight to be suspended to it, keeping the limb a little at rest, like the hand of an assistant, but not an extension by weight or other contrivance, which gives the limb its proper length, except in very few cases, as that mentioned by Mr. MacCormac in his *Notes and Recollections*, which healed without difficulties and without any perceptible shortening. The most common case is, that for some time after the accident the muscles retain a tendency to retract, which is increased by opposition, and ceases by and by in a favorable position of the broken limb. The idea of subduing muscular action by constant extension, even in compound fractures, is not new; but it had not been tried before by contrivances so dangerous as a plaster of Paris bandage. This is applied under chloroform, which relaxes the muscles; the limb is made straight, and as long as its fellow. When the action of chloroform has ceased, the muscles recover their activity, and are kept in extension in spite of their violent efforts to contract, which often break the plaster bandage. The tension, which is kept up by mechanical means, makes the sensibility rise to a high pitch, and severe inflammation follows. If the plaster bandage be loosely applied, by putting wadding and a flannel roller between, it is often well borne, but the limb is as short aftewards as if no bandage had been employed. While I was writing this in Hanover, on the 1st of May, a young captain came to me, from whose gait it was not to be expected that he had had a gun-shot fractured thigh in 1870. A plaster bandage had been applied on the third day; he could not bear it. The surgeon who took it off next day, told him that the fragments had taken a bad position under the bandage. From this time he was treated without restraint, and cured in six weeks, his limb lying in a wire basket. The shortening was one inch of his left lower extremity. His brother met with the same accident at the same time, but was healed with a shortening of five inches. Large splinters came away by suppuration, some of them being three inches long. The captain came to consult me about his brother. He is in service again long ago.

The danger of early plaster bandages on other parts of the skeleton is less than in the thigh; but it exists and is very great in the humerus, where pressure is very liable to stop the venous current, or to drive a splinter of bone into the brachial artery. I treat these fractures by letting the arm lean on a soft cushion, which is tied to the thorax, the fore-arm being suspended in a sling. In

Schleswig-Holstein I had 24 successful cases amongst 29. One of the German surgeons who took part in the late war—Dr. Ruprecht of Munich—prefers the plaster-bandage; but amongst the three cases which he had to treat, there was one which proved fatal on the seventeenth day, by hæmorrhage, a splinter of bone having opened the brachial artery.

I differ from Mr. Guthrie, besides, in his appreciation of trephining the skull, which I have tried to exclude entirely in military practice, as useless in some and unnecessary in other cases. I consider a state of coma from depressed skull no more as an indication for applying the trepan, than a comatose state in typhus as an indication to rouse the patient from it by any other means but those which are in accordance with his general state—cold, for instance, but not stimulants. As soon as the fragments of skull become detached by suppuration, the comatose state ceases by itself.

The great difficulty in settling this skull-question consists in that some patients survive the use of the trepan, or of an early extraction of splinters, and that some recover their senses very soon after the operation. This seems to be a conclusive proof of the legitimacy of active interference. But there is no depending upon it; the patient may die just as well after having recovered his senses completely, and, as experience has shown, more easily than if you let him continue comatose by not disturbing the splinters. This might have been expected, from very solid physiological reasons. By taking away the splinters at an early period in cases where the dura mater is wounded, you open the arachnoid cavity; air and acrid matter can enter it. Brain-substance, when bruised, thus becomes putrid, while it might have been eliminated by resorption, without access of air. Subcutaneous operations practiced in modern times have done a great deal to put stress on excluding air; but even before their time, Dease and Sir Benjamin Brodie came to a conclusion that access of air was to be avoided in cases of fractured skull, and that no interference ought to take place for depression unless it was warranted by cerebral symptoms. John Hunter was not yet arrived at this degree of caution when he said in his Lectures (Palmer's edition, vol. i. p. 493) "All fractures of the skull may be called compound, for if not so naturally, they are made so by the removal of the scalp."

In the retrograde tendency of surgical interference with a broken skull it was an important step not to remove the scalp; but other steps were to be argued. An open scalp-wound over a broken skull does not produce a great change in the danger of the case. Spreading inflammation of the membranes of the brain or deep-seated suppuration does not necessarily follow from it; but these are very likely to take place if you open the arachnoid cavity by removing the splinters which have kept it closed. When the splinters come away by a very limited suppuration at a later period, the arachnoid cavity is closed by adhesions of dura mater to the brain. It is often impossible to say beforehand whether the dura mater has been opened or not. If it is open, the danger is rendered much greater by removing the splinters. The London *Medical Times* of 1860 contains a list of eighty-three cases in which the trepan had been used, fifty-one of whom died, and thirty-two recovered. Amongst those who did well, the dura mater had been wounded but in three cases; the others, as well, were such that, according to my experience, they might have recovered without using the trepan or early extraction of splinters. Gun-shot fractures of the skull are always compound; their successful treatment without active interference deprives this of one of its strongholds, the presence of an open wound, which formerly seemed to permit further violence. During the two Schleswig-Holstein campaigns of 1849 and 1850, I had to treat forty cases of gun-shot fractured skull, thirty-three of whom recovered, and seven died. We had one case of trephining with happy result, but it was of that description that it might have done well without interference. The others were subjected to an antiphlogistic treatment by ice, bleeding, purgative medicines, and low diet. The splinters were not removed before being quite loose. I have been blamed by Mr. Pirogoff and others for totally excluding active local interference in gun-shot skull fractures; many others have followed my example. You will admit, gentlemen, that there is no knowing of what use a thing may be before having tried it. My object was to know how far we might get without active interference. The result was not unsatisfactory. It was the same thing with treating typhus patients without stimulants. By trying it, on physiological principles derived from morbid anatomy, I tried it and found it very successful. What has pleased me most, from a medical point of view, during the late war, was to find two hospitals in Rheims and one in Versailles where the number of deaths from typhus was not above eight per cent. Weak broth and some ounces of very sour wine were all the stimulants employed till the fever was over. The wine which I tasted was so sour that it must have contained more acid than common vinegar, as I know from comparative experiments with potash. So it probably did the same service as phosphoric acid, which I prefer, with a well boiled water-gruel for diet during the febrile stage. The two hospitals in Rheims were close to each other; in one the patients were cooled by immersion, in the other by active ventilation in tents, while the results were quite the same in both. In other hospitals, the mortality from typhus amounted to 25, even to 50 per cent. Nothing shows the great value of the medical art and science better than such striking differences in the results of treatment, under the same circumstances in regard to constitution, causes and symptoms.

Inertness of Strychnia used Hypodermically.

Dr. Thomas Kennard writes to the *Medical Archives*:—

Noticing some time ago, in the January number of the *American Journal of Medical Sciences*, an article from Dr. J. J. Chisholm, of Baltimore, in regard to the surprising effects of strychnia hypodermically, in the treatment of amaurosis, as first recommended and employed by Professor Nagel, of the University of Tubingen, and in consideration of the eminent position and reputation of both professors, I determined to try the stimulating effects of that drug (as recommended) upon the optic nerve at my earliest opportunity, and accordingly, on the 5th of February, I commenced the hypodermic injection of strychnia with a patient whom I believed was suffering from white atrophy of the optic nerve, and who had had no vision from one eye and very imperfect from the other for several years, and for which trouble every means which promised good had been tried in vain. I was naturally timid in my first experiments with so powerful a remedy, and began with the 1-60th of a grain, which, having no perceptible effect, I then increased day by day, to the 1-40th, 1-30th, 1-24th, 1-15th, 1-12th, without perceiving any benefit or effect whatever. I then, on the seventh day of treatment, used the 1-12th, morning and evening, for some five days, when I combined with it the elixir quiniæ et ferrit strychniæ ʒij, or the 1-30th of a grain of strychnia three times a day, and still perceiving no effect from this heroic treatment, except slight twitching on one occasion, I began to consider my patient strychnia proof, and ventured to increase the hypodermic dose, on the fourteenth day, to the ⅛th, then to the ⅙th, 1-5th, and even the ¼th, without any perceptible effect, more than I expected from the tonic influence of the elixir taken internally. This patient was a delicate and infirm man, about 50 years of age. Whilst he was under treatment I used hypodermically the same remedy, only increasing the amount injected more rapidly, with a young woman who, within a short space of time, had lost completely the senses of smell, taste and vision, but was apparently otherwise in the enjoyment of perfect health. I commenced with her on the 13th of February with the 1-24th gr., then day by day I increased to the 1-15th, 1-10th, ⅛th, until the sixth day I injected the ⅛th, and repeated that dose five days without any perceptible effect whatever, except upon the third or fourth day, when she had some twitching, and her vision was improved slightly, or rather she thought that she could distinguish light from darkness, and perceive large bodies passing her, which she could not do before. She was also taking the elixir internally, 1-30th of a grain of strychniæ three times a day. This improvement was only transient, however.

On the 17th of March I was called to see an Irish woman who for seven or eight months had been suffering with partial paralysis of the arm and leg of the right side, accompanied by a most intolerable feeling of coldness, as if ice was packed on that side. I commenced with the 1-24th of a grain of strychnia hypodermically, and the elixir of quinine, iron and strychnia ʒij internally, three times a day, and gradually increased it to the 1-12th, ⅛th, and the ⅙th, which dose I continued until the 27th without any toxical effect whatever. Her limb soon got naturally warm, but most likely from the effects of the strong veratria ointment which I rubbed it with, though perhaps the strychnia produced it, as Echeverria recommends it very highly in such cases, and reports several thus treated satisfactorily.

On the 1st, 2d, 4th and 5th of April I injected the 1-12th, ⅛th, ⅙th, and 1-5th of a grain of strychnia into the arm of an old lady 72 years of age, for partial paralysis, with some benefit, but no poisonous effect whatever; there was not the slightest twitching produced in her at any time, and I had employed it with her on one former occasion with the same result.

Such has been my short experience with the hypodermic injection of this powerful remedy, and it differed so materially from the published reports of others, that I thought it worth while to make a note of it; for although authorities have varied in regard to the dose of strychnia to be administered hypodermically, and Courty and Eulenberg have injected as much as the ⅛th of a grain, the majority have recommended from 1-60th to the 1-24th of a grain, and cautioned us against the dangers of even the latter amount; and so far as I know, none before me have doubted that it would produce its usual physiological and toxic effects when injected beneath the skin.

The Use of Love-Drinks in Ancient Times.

We make the following interesting extract from a lecture by Dr. DAVID FERRIÉR, Professor of Forensic Medicine in King's College, London, in the *British Medical Journal*:—

Among the Greeks and Romans, Medea was universally regarded as the greatest adept in the art of preparing philtres; and hence the term "*Medeides Herbæ*" was used by Horace and Ovid to designate such substances generally. Next in reputation stand the Thessalian women, who may be supposed to have learned the art from Medea, and who attained great celebrity in all that related to poisoning, sorcery, and incantation. Hence "Thessalian arts" and "Thessalian poisons" are frequently employed by the classical writers as generic terms, applicable to all forms of poisoning*

Philtres are described by Ovid and others as affecting the reason and causing a phrensy which sometimes terminated fatally.

* "Hic magicos affert cantus, hic Thessala vendit
Philtra, quibus valeant mentem vexare maritis."—JUV.

"Quæ saga, quis te solvere Thessalis
Magus venenis, quis poterit Deus?—HORACE.

"Philtra nocent animis, vimque furoris habent."

Lucretius, the great philosophical poet of the Ciceronian era, is said to have written his poem "On the Nature of Things" in the intervals of delirium occasioned by a philtre or love-potion secretly administered to him by his wife or mistress, Lucilia; and Lucullus, the Roman general, is stated to have died in a state of delirium from a similar cause. The laws of the Twelve Tables contained special provisions against this form of poisoning. It was included under the head of sorcery, and was punished as a capital offence: "*Qui malum carmen incantat, malum venenum faxit duitve, parricida esto.*"—(Table VII.)

Though it would appear, therefore, both from the accounts we have received and from the necessity of special enactments against it, that the administration of philtres often led to results far more serious than were contemplated by those who used them, we can hardly regard otherwise than as a subject of amusement the credulity which prevailed even up to a very late period with respect to many substances held in high repute, and supposed to be possessed of marvelous properties. Most of these substances would hardly come under the head of poisons, or even noxious substances, as we understand them; but yet in most countries their administration was forbidden, as coming under the head of sorcery and witchcraft.

The idea which guided the selection of some of the substances regarded as stimulants of love we might understand, though it would be rather difficult to do so in the case of others. One of the most celebrated agents of this sort is the substance called *hippomane*, described by some as a kind of *vernix caseosa* found on the forehead of a newly born foal; by others, as of a much more disgusting nature ("virus destillans ab inguine equæ coitum maris appetentis"). Animals of various kinds, and parts of certain animals, such as the testicles, the hair from the tip of a wolf's tail, a bone from the left side of a toad devoured by ants, ribs of snakes, etc., were all used as powerful ingredients in love-cups. Menstrual blood, and particularly that of a red-haired woman, was not only greatly esteemed as a philtre, but was regarded also as a most powerful poison. It is a curious circumstance, and one which we find great difficulty in accounting for, that not merely human blood, but the blood of animals in general, was universally looked upon as a poison in ancient times; and that this belief should have been shared by medical writers up to a comparatively recent period. We read in Herodotus that Psammenitus, King of Egypt, was put to death by Cambyses by being made to drink bullock's blood. Such also, according to popular belief, was the mode in which Themistocles committed suicide. Unwilling to fight against his countrymen, he drank a goblet of the blood of a sacrificial ox, and expired almost immediately. Even up to the time of Blumenbach, in the middle of the last century, the belief that blood was poisonous was general, and it was treated of as such in many learned works on poisons and legal medicine. Zacutus Lusitanus, writing in 1657, relates many instances of dreadful effects resulting from the drinking of blood. It is worth while quoting one of these. A student, animated by the spirit of practical joking, gave to another, instead of wine, two ounces of the blood of a red-haired woman mixed with sugar. The victim of this joke did not experience any immediate bad effects, but after a day or two he passed into a raving state, and became ultimately a confirmed idiot.* One is tempted to remark that the individual in question cannot at best have been far removed from this state, if he could mistake for wine the nauseous mixture offered to him. And, in the opinion of Andreas Cæsalpinus, who nearly anticipated Harvey in the discovery of the circulation, it is to human blood that we owe the origin of one of the most virulent contagious diseases. He traces the origin of syphilis to the fact that the Spaniards, in abandoning the small town of Somma, at the foot of Mount Vesuvius, mixed all the wine of the place with the blood of the patients in the hospital of St Lazarus.

Blumenbach, in his lectures, recommended his students to make experiments in order to clear up all doubts as to the poisonous qualities of blood. One student experimented on himself, and drank seven ounces of warm bullock's blood without experiencing any evil effects. Another preferred to experiment on a dog, which likewise survived the experiment.

Returning from this digression on blood once more to the subject of philtres, we find that the belief in them was strong even as late as the time of Van Helmont, in the middle of the seventeenth century. Van Helmont himself was fully persuaded of their efficacy, and perhaps the most remarkable statement in regard to them occurs in one of his writings. Here is a translation of it: "I know a plant of common occurrence, which, if you rub and cherish in the hand until it becomes warm, and then take the hand of another and hold it till it also becomes warm, that person will forthwith become stimulated with love for you, and continue so for several days."

A plant is mentioned by Theophrastus, to which even more powerful effects were ascribed, but which need not be more particularly specified.

There were not a few, however, even in ancient times, who were skeptical as to philtres. Ovid, who speaks so much of them, had his doubts; and, in a letter to a young lady, he recommends, as far the most preferable prescription, "*ut ameris, amabilis esto.*"

From these and similar truths, the influ-

* Fatuus in eternum remansit, quum nullo remediorum genere possit hæc stultitia emendari."—Quoted by Marx, *Gifflehre*, ii, 274.

ence of philtres gradually ceased to be believed in, and disappeared from medical literature by the middle of the eighteenth century.

Treatment of Retention of Urine.

A plan of treating retention of urine is suggested by Dr. A. W. STEIN in the *Medical Record*. He says—I tested it for the first time last summer, upon a patient whom I attended with Dr. E. G. Rawson. He was nearly eighty years of age, and suffering from extreme distention of the bladder depending upon stricture and prostatic enlargement. A delicate catheter was with difficulty introduced, and the bladder partially relieved; but, owing to the atonic condition of the organ, it was unable to completely evacuate its contents. Whereupon I attached my rubber-tube to the catheter, and, having previously compressed the bulb, allowed it *very slowly and carefully* to expand. In this manner I succeeded in removing an additional pint or more of stale ammoniacal urine, which, in consequence of the feeble condition of the patient, could not have been expelled in any other way. I have since had occasion to satisfy myself that this operation is eminently adapted to cases where over-distention has existed for some time, and especially in advanced life, or in those affected with enlarged prostate, in whom a sort of pouch or permanent reservoir so frequently exists at the "bas-fond." The advantages derived from thoroughly evacuating the bladder before local treatment is instituted in chronic cystitis are obvious.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

A System of Surgery; Pathological, Diagnostic, Therapeutic and Operative. By SAMUEL D. GROSS, M. D., LL. D., D. C. L. Oxon., Professor of Surgery in the Jefferson Medical College of Philadelphia. Illustrated by upwards of fourteen hundred engravings. Fifth edition, greatly improved and thoroughly revised. In two volumes. Philadelphia: H. C. Lea, 1872. pp. 1098—1170.

The question but recently sneeringly asked, "Who reads an American book?" has here a fitting reply. Prof. Gross has good cause for self-gratulation. This, the great work of his life, has been adopted throughout the whole country, and is constantly quoted as the standard authority. Not only is this the case at home, where its author is so well known and respected for his vast surgical knowledge, but abroad; our brethren on the other side of the waters have universally commended it. The Dutch have even appropriated it and made it fully their own by translating it into their language.

Nor is this edition a mere reprint, for a careful examination of these two bulky volumes shows a most careful revision, with the addition of much valuable matter. These additions are so vast and valuable as to make it almost a matter of necessity for those who already possess former editions of the work to add this to their array of authorities. Thus we find many and valuable additions on the subject of gun-shot wounds, well illustrated by cuts obtained from the office of the Surgeon General of the United States; Dr. Wm. Thompson, an authority on Diseases of the Eye, has taken charge of that department, and added chapters on refraction and accommodation.

One chapter has been devoted to Railway Injuries, a subject which is becoming increasingly important, frequently requiring of the surgeon a ready adaptability of his knowledge for injuries of a novel form.

We congratulate the learned Professor on his success in book-making, and the profession on the possession of so valuable a text book, which will rarely fail them when consulted.

While we find so much to commend, we cannot refrain from regretting the absence of some allusion, in the chapter on Carcinoma, to the views of Dr. Washington L Atlee, of this city, as to the value of continued and long-repeated doses of arsenic to prevent the return of that disease. Dr. A. has repeatedly expressed his earnest belief in the powers of this drug to prevent the return of cancer. In this he has been confirmed by his venerable brother, Dr. John L. Atlee, of Lancaster, Pa., and others.

The publishers have gotten up the work in their usual style, the typography proving satisfactory to the eyes of the reader.

We cannot close our hasty notice without adding a word as to the copious index. A complete analytical index is a necessity to every book, but vastly important to a work which will be so frequently consulted as an authority like this. The busy physician has no time to waste, and requires to find the object of search at a glance. Hence an index which shows him at once where he may find all that the work contains on the subject of his inquiries is truly invaluable.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, AUGUST 31, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE STUDY OF DISEASE.

Other capacities being equal, that which distinguishes an eminent practitioner is knowledge of disease.

What this phrase means is not quite clear. At the basis of many long and bitter discussions lies an ignorance of the meaning of words. Counters for the wise, words are the sterling metal of the unwise. That the pattest phrase or the roundest word may be empty of any idea at all, is a shocking fact to the latter class.

A recent address on therapeutics lays great stress on the importance of studying the disease when left to itself, without medicine. The speaker maintains that this inquiry "should be answered before any rational administration of drugs could be determined on. An answer was sought for, but in vain. The books did not give the desired information. All the cases they furnished had been submitted to remedial agents of real or supposed efficacy. The question appeared never to have been thought of; or, if thought of, not to have been deemed worthy of solution, or even of consideration."

The basis for rational therapeutics, the writer believes, is a study of the nature and progress of disease in its undisturbed course. He asserts:—

"If this question had been thought of, and an attempt made, whenever practicable, to answer it, for Asiatic cholera, on and since its appearance nearly half a century ago, the profession might have established, possibly by this time, some rational course to pursue, instead of being left to rush blindly, as much at a loss as ever, into all sorts of treatment; and we might have been saved the mortification of witnessing a recantation, at the last hour, of one of the most eminent and influential teachers, now recommending a course quite opposite to that which he has taught with 'silver-tongued eloquence' for forty years past. If the plan now advocated by him is right, then countless patients have suffered at the hands of his numerous disciples up to this time."

The inference which is plainly drawn is that owing to neglect of this way of studying disease, therapeutics are in their present unsatisfactory condition, and the world has grievously suffered from the *nimia diligentia medici*.

The assumption here is that a disease is an entity, which we can study as we can a flower or a fossil; that having seen it once or several times, we can thereafter recognize its features and forecast its results. There is enough of truth in this view to make it attractive, and enough of fallacy to make it dangerous. With sparse exceptions, a disease is a fluctuating aggregation of symptoms, alike in no two cases, in progress and termination influenced by so many unknown factors, that to watch one or many cases to their close could afford no ground for a prediction about the next one.

The much decried and much abused plan of empiricism is after all the only national basis of therapeutics. Through it alone, every valued remedial agent we possess was obtained. The unpleasant associations which have clustered like foul parasites to that venerable name should not alarm the votary of sound knowledge.

Given, a certain collection of symptoms,

distressing or painful, our duty is directly to remove them. If we have the means, let them be applied at once; if we have not, what avails it to stand apart in idleness or in barren sympathy? With judgment, caution, and close attention, we should try one after another, and over and over again, those remedies which we believe most likely to decrease the suffering. This is the rational basis of therapeutics, and to do this well and skillfully should be our object in studying disease.

Correspondence.

Cowardly and Brutal Inhumanity.

Eds. Med. and Surg. Reporter:—

The harrowing stories the newspapers are continually circulating, of a woman abandoned to small-pox and death, and which, no doubt, have come under the observation of many of your readers, it seems to me require, for the benefit of those who are not in a situation to know the exact facts in the matter, a statement on the part of some member of the profession, through the medical press, who is qualified to give information of the truth or falsity of the occurrence alleged.

I have taken considerable pains to learn from reliable sources whether the exaggerated accounts as published so extensively be true, and I regret to state that they represent substantially the real facts in the case. In the most lenient view of the affair, the occurrence, to my mind, exhibits a piece of barbarism and inhumanity that is a disgrace to the community that permitted it to occur, and reflects, as well, a reproach upon the civilization of the age.

The story briefly told is an instance of inhuman cowardice from fear of the contagion of small-pox; and an abandonment of the victim of the disease to neglect of care, nursing or medical attendance; and, finally, when death closes the scene as to her earthly misery, letting her body remain exposed to be preyed upon by the cats and dogs in the neighborhood of the untenanted hut to which she had been consigned, till her remains, from putrefaction, became a stench in the atmosphere of her secluded and shunned abode.

In this inevitable recital I ought to except *one* being in whom lingered, in that shameless region, a spark of human sympathy and kindness. But of this single instance of display of humanity I will more particularly speak in connection with the narration of the story.

The woman in question, whose last days and tragic death have rendered her so famous, was named Butler. She was comparatively young; but whether a *Miss* or *Mrs.* Butler I am not satisfactorily advised. At the commencement of her sickness she was employed as a domestic in a family by the name of Smith, residing near the village of Unionville, New York, and close upon the borders of New Jersey. Not long previously she had, unknown to Mr. Smith's family, been engaged in nursing a woman living at Gardnerville, near Unionville, who, it transpired, had small-pox. Upon the appearance of symptoms of that disease, she was sent away, and repaired to the house of a man named Seeley, with whom she had formerly lived as his wife. As soon as he learned the nature of her illness, he took her to an old house in the woods near his own residence. A physician of Unionville was called to see her, visiting her but once; afterwards calling at a considerable distance from the house, prescribing for the patient, and leaving the medicines with Seeley. Provisions were supplied in the same way.

The old house in which the woman lay was on the edge of the drowned lands, just over the Jersey line, in the town of Wantage; and there was no adequate protection from rain or light, by reason of the dilapidated condition of the hovel.

Here, without proper care, treatment or attention, the unfortunate woman was compelled to remain; and in the loneliness, desolation and horror involved in the situation, even the faithful Seeley's courage could not sustain him in the last, final close of the poor woman's earthly career. Witnessing death about to summon away the object of his care, he hastened to the nearest neighbor to announce her approaching end. The neighbor gave him soap and a suit of clothes. After he had cleansed himself in the nearest stream, he donned this new suit, returned to his home, ceasing all further interest in the woman over whom, when forsaken by every other human being, he had watched with such singular fidelity.

The body of the deceased woman was permitted to lay in the horrible place of her solitude from Friday morning until the following Tuesday, the 18th instant, the poor authorities of the town, in the matter of her burial, evidencing a meanness in keeping with that which, from first to last, characterized the conduct of all living where the miserable woman did. Her interment was delayed during the time mentioned. In the interval the cats and dogs of the neighborhood going freely in and out of the hovel, and doubtless spreading the contagion as they went, because of the unwillingnes of the poor-master to pay a party early applied to the paltry sum of $25 for the loathsome service, fixing *his* maximum offer at $20. Finally, but not till decomposition had rendered the office well nigh impracticable, he found parties willing, though at greatly increased figures above his first offer, to bury the remains of this disgracefully neglected woman.

The present age of advanced medical science, especially when we consider the wonderful discovery of vaccination, which has for so many years been found to be an almost infallible protection from small-pox, certainly leaves the inhuman cowardice in the case which I have related, without excuse or shadow of excuse.

J. H. Thompson, M. D.

Goshen, N. Y., June 29, 1872.

Poisoning by Stramonium.

Eds. Med. and Surg. Reporter:—

Happening to read over notes of a case of poisioning by stramonium seeds, and also this same afternoon to read in your valuable journal a similar case reported by Dr. Brunning, I think it may be worth while to send you my case.

I have no doubt but that many such occur every autumn, of children eating and being poisoned by a plant which is so common in almost all parts of our country, and, as in Dr. B.'s case, sometimes some medico-legal interest may enhance their importance.

October 20, 1866, I was called in the evening to see a child of Mrs. N., a little girl, three years of age. I found it in a state of wild delirium. It was with great difficulty that the mother could hold it on her lap. It would forcibly throw out its legs and stiffen them, and at the same time throw them wide apart from each other. The arms were being constantly thrown out, as if trying to reach and get hold of something; and sometimes it seemed as if some object had been secured, and was for a moment fumbled in the fingers. The pupils were dilated, and the eye looked wild. Its cry was a kind of scream; a little froth was seen in the mouth; the surface of the skin was hot; the restlessness was very great.

Suspecting poisoning, I gave it an emetic of ipecac., with a little turpeth mineral. It soon vomited, and together with what it had eaten at tea time (which was chiefly bread), a good many little black seeds were observed, which were soon found to be the seeds of the stramonium, many plants of which grew near the house. Afterwards, a dose of castor oil was given, and more of the seeds were passed from the bowels.

The symptoms continued through the night, and, in an abated form, part of the next day. The mouth and throat were very dry, and the saliva very viscid, but by the next evening these, with the other symptoms, so much lessened that the child slept some, and the next day but one after the poisoning it was pretty well, with the exception of some croupy cough, which probably came from wetting of the head and other exposure during the first night of the sickness.

Some two years ago I was called at daylight one morning to see a child said to have died very suddenly and unexpectedly at our orphan asylum. The matron informed me that the child, a little boy of about three years, had been subject to fits, the cause of which was not known, and he was never well and strong; that the night before he had behaved rather strangely, and appeared wild, but that she did not think him dangerously ill. She put him to bed with one of the older girls to take care of him. In the night he tried often to get out of bed, and once did so, and also out of the room to the stairway and fell down two or three steps. He was put to bed again, and it was supposed he went to sleep. At all events, the girl (his attendant) slept, so that it was not known till near morning what happened and then he was found apparently struggling in a convulsion, and soon died.

I supposed, and gave it as my opinion from all I had heard, that he died from a fit, which might have been an aggravated one of the kind he had had before. But a

few days after it was found that the children had been gathering stramonium seeds and making strings of them, some of the plants being just outside the grounds. One little girl was said to have eaten them, so that the matron gave her an emetic. Learning this, I particularly questioned the matron concerning the symptoms of the child that died, and she told me of his restlessness, and reaching out after some imaginary thing, his wild look, etc., so much like those of the child I had attended, that I became convinced that it died from poisoning by the stramonium. Recently, some evil-disposed persons, dismissed from the employ of the asylum at the time the matron took charge, have, among other reports, asserted that the little boy, said to have died in a fit, was cruelly beaten, starved, etc., by the matron, and came to its death in consequence. No evidence worthy of belief can be adduced of this; and in this connection the symptoms of the poisoning, given without any knowledge of what might be expected, are important and interesting.

I notice that a cutaneous eruption, a red rash, is mentioned in the books as a symptom of stramonium poisoning. I do not remember that my patient had it, but the skin of the little orphan boy was found, after death, mottled in a marked degree.

A. W. ROGERS, M. D.

Paterson, N. J., July 22, 1872.

NEWS AND MISCELLANY.

Patents Issued.

List of Medical and Surgical Patents issued from the United States Patent Office to Inventors, for the week ending July 30, 1872, and each bearing that date. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C.:—

Medical Compound for Cure of Colic, etc.—W. W. Gardner, Russellville, Kentucky.

Medical Compound or Cough Lozenge—E. Gauvreau, Quebec, Canada.

Dentist's Chair—O. C. White, Hopkinton, Massachusetts.

Changes in the College of Physicians and Surgeons of New York.

Dr. James W. Lane has resigned the chair of Materia Medica and Therapeutics, and been appointed Adjunct Professor of Obstetrics and the Diseases of Women and Children. Edward Curtis, M. D., has been appointed Lecturer on Materia Medica and Therapeutics, and Charles F. Chandler, Ph. D., Adjunct Professor of Chemistry.

Personal.

FROM letters just received from Professor Gross we have the assurance that he will leave Liverpool on the 24th proximo, and that he will be in Philadelphia in time for the opening of the Fall course of lectures in the Jefferson Medical College.

WE are glad to announce that Professor W. A. Gobrecht, of Cincinnati, has much improved in his general health since his stay in Philadelphia.

DR. ROBERT AMORY, of Franklin, has been appointed Professor of Physiology in the Maine Medical School.

PROF. TYNDALL is about to visit the United States.

An Objection to Opening Medicine.

The Cincinnati *Medical News* tells of a man who swallowed a penknife. He did well, for the knife was closed; but some M. D. gave him *opening* medicine, and that settled him.

New College.

The College of Physicians and Surgeons has been established in Wilmington, N. C., with Dr. W. W. Lane as Dean.

Anæsthesia.

A new claimant appears, having discovered it in May, 1843. Now for the one who discovered it in 1842!

A NEW stimulant has been invented in England, whose growing use is exciting considerable alarm. The stuff consists of a mixture of naphtha and ether, and it produces a kind of intoxication which its admirers find highly agreeable. No check can be put on the consumption of the fluid, for the reason that it is not sold under the name of any excisable spirit, and apparently an act of Parliament will have to be devised to meet the difficulty.

THE Kansas City *Medical Journal* is after Dr. D. W. Yandell for his address before the American Medical Association, in Philadelphia. The editor regards Dr. Y. as slightly in error in his views on medical education.

DR. JONATHAN D. MARVIN died recently, at his residence, near Morristown, N. J., aged 83 years. He was an elder in the First Presbyterian Church at Morristown for nearly forty years.

ACCORDING to the index of the last revision of the statutes of Maine, it is illegal to expose veal for sale in that State less than four years old.

MEDICAL registers are announced as in preparation for Chicago, Boston, and other places. Such books are valuable. Success to them.

THE

MEDICAL AND SURGICAL REPORTER.

No. 810.] PHILADELPHIA, SEPT. 7, 1872. [Vol. XXVII.—No. 10.

Original Department.

Communications.

WHAT IS TEMPERANCE?

By Chauncey F. Perkins, M. D., LL.D.,
Of Erie, Pa.

It is the safe and moderate use of the good things God, in his kind providence, has placed within the reach of our power.

Temperance has nothing to do with things that are really sinful; but much to do with those things which are lawful and right. The abuse and excessive use of those good things is intemperance. Things which are sinful are to be wholly avoided: with them no compromise is ever admissible.

With this brief introduction, in which I have presumed to define temperance and its opposite, I proceed to speak of Intemperance in the use of Intoxicating Liquors.

Within the last fifty years much time and labor has been spent by the religious and benevolent in devising and carrying into successful operation some scheme for the suppression of intemperate drinking—intemperance, as it is called by way of eminence; but after years of experiment and a perseverance worthy of the happiest results, little seems to have been gained, and the demon of intemperance, with scarcely reduced power, holds its empire over the appetites of men and continually consigns its thousands to an untimely grave.

Observing this want of success, and considering the magnitude of the evil to be redressed, it is evident that no pains should be spared in searching for the causes of failure, and if practicable, discovering some efficient remedy to which a general resort can be made.

Dr. Benjamin Rush, of Philadelphia, while connected with the medical department of the University of Pennsylvania, conceived the idea of making a strong effort to suppress or at least greatly lessen the prevalence of the vice of intemperance, and made considerable headway, I believe, among the students of the College and others in the right direction. Dr. Rush died in 1814, and little was done to arrest the progress of the evil, while it increased in an alarming degree, and until observing and thoughtful people were startled at the rapidity of its growth and showed signs of uneasiness and alarm. About this time, 1830, the Rev. Dr. Beecher began to deliver lectures on the subject of intemperance; these attracted considerable attention; many persons of the more reflecting sort fell into his views or sympathized with him from the first, and taking an active part, a good beginning was again made, and a sensible advantage gained over the enemy; many intemperate people as well as temperate, seeing the reasonableness of the reform recommended, patronized and adopted it, if they had not already become imbecile slaves to the tyranny of the vice; and a flattering progress was gaining on the confidence of the people; but in all this time little or nothing was done for the confirmed and helpless inebriate; he was looked upon and passed by as in an inextricable and hopeless dilemma, and mostly left to his fate. A few benevolent persons, however, realizing the drunkard to be suffering and in a manner helpless with a physico-moral malady,

pitied and strove to heal him of the disease.

Now came forward, in all the vigor of a youthful adventurer, the Washingtonian Temperance Society, whose corner-stone was the Reformation of the Drunkard. Here various and opposite materials were at work, the sober man and the inebriate; and how admirably they wrought together.

Much good was effected by this Society; a goodly number of drunkards were permanently restored to reason and their families. Not a few men who were reformed by the kind and gentle treatment extended to them, with persuasion and cheerful encouragement, enlisted in the cause at once, and as good angels went about to lead others from the errors of their way, holding private interviews with the intemperate, or delivering lectures, or making speeches in public, as they might feel disposed or be able, and often these public exhibitions were highly interesting, and made before crowded assemblies. This Society with its happy results had its day and gradually passed off the stage, and Teetotalism, as it has been facetiously called, came to be the order of the day, putting on various forms and assuming vast proportions. Some persons were so impressed with the idea of no intoxicating liquors, that they cut down valuable orchards, destroyed large quantities of distilled or fermented liquors, and some people went so far as to refuse the use of wine in the sacrament; legislators have been appealed to for laws to forbid the manufacture and use of alcoholic drinks.

Maine has taken the lead in this matter, and Massachusetts is not far behind in the enterprise; everywhere the people are astir, and the great and all-absorbing idea of many is universal and total abstinence, by all classes and ages, from everything that can intoxicate; and this state of things continues and grows more and more intense among its votaries, many of them spending much time in lecturing, in long, short, or in impromptu addresses; in circulating and even pressing upon the community, in large assemblies, in families, in schools, and upon young children, the Pledge of Total Abstinence, thus laying them under a solemn obligation not to taste of ardent spirits, wine, cider, beer, or other stimulating or intoxicating drinks. And all this directed and kept up by an excited and fervent zeal constantly fanned into activity by a class of men, honest, well-disposed, affectionate friends, true philanthropists, but with strong prepossessions and prone to pursue their favorite idea to its ultimatum, little regarding others equally worthy of their attention. And the question is modestly asked, What is this excited, partisan, yet well-meant scheme likely to accomplish? Will it have its day, and like its predecessors expire at the inception of some new plan for the prevention and cure of intemperance? With all that has yet been done, the demon is still rampant.

A little has been gained in certain localities and by numerous benevolent and Christian societies and warm-hearted individuals; but in general there appears to be no abatement of the evil, and it may well be asked, What is it our duty to do? What, as philanthropists and the true disciples of the Messiah? Surely, it is not right to stand idle, and see the ruin go on, and not make an effort to arrest it. So many methods have been tried, the last during a long period of years, it should seem that some wisdom would by this time be acquired, and that a more promising course could be pursued.

Gentlemen—my friends and brothers of the profession of medicine—what shall be done? The disease afflicting our vision with all the horrors of a vicious and deadly epidemic, shall we fearlessly engage in its treatment as we would in an infectious fever, but with better hopes? Shall we inquire into its secret springs, and examine its snaky form, as with a powerful microscope, and thus, if possible, learn how to treat it successfully? You, far more than any other learned body, are acquainted with the entire and severed constitution of man, and, therefore, eminently competent to restore order and harmony when lost or impaired.

Suffer me to suggest that without the blessing of God no scheme or plan of operation of whatever kind can be expected to prosper. This is said, not to inform those who know as I, but to exhibit at once the ground on which I stand; if we look for our plans and labors to succeed, we must expect the blessing of God. When the first temperance societies were formed, they called for strict and inviolable abstinence from all excess in the use of intoxicating liquors as potations, and nothing more, and those societies, while they were allowed to operate freely in their own way, without commutation or modification by those which followed, were, although in their first infancy, evidently gaining favor with the community of all

classes, and I think I do not violate the truth when I suggest that they had an encouraging measure of success. The reason and understanding of men and women were addressed, motives were laid before the people, and much "moral suasion" was used with them, and they were not in general trammeled with pledges and promises made in earlier or later life. These come up from childhood and age, and look us in the face, while in every stage of our earthly existence they have a certain binding effect; the mind is uneasy, and nothing so hard to keep as a promise made under excitement or constraint.

Amidst a flourish of pledges manhood is scarcely considered, and without resisting the wave, the individual goes with the current that sweeps past him. This is teetotalism; and is it a proper corner-stone on which to erect a permanent superstructure? Is it not rather a sandy foundation? Where is teetotalism found in human reason; where in the Oracles of God? Is it not an assumption that man's wisdom is superior to that of God? The Divine requirement is simply temperance.

Man essays to improve upon this, and presumes to have found out a better way, and insists on the entire and universal disuse of what God allows us freely to use, only that we avoid excess. Now as there is in the Scriptures of truth no trace of an interdiction of the safe and moderate use of alcoholic drinks, must we not look upon ourselves as taking out of the hand of our Maker, and stealing from Him, the right to fix and establish His own rules for the use and distribution of His favors. Shall we not believe, therefore, that this daring assumption is displeasing to God, and because of it He withholds from it His blessing? Were the enterprise divested of the feature of total abstinence, so objectionable to a vast proportion of the people, would it not have more favor, and thousands join it that now stand aloof? A resort to persuasion, kind admonition, and advice daily, or very frequently administered, would probably work wonders.

From all I have seen in the course of a long practice, I am convinced that the confirmed inebriate is much too often given over as a lost man; indeed, I think that he should never be given over to inevitable and helpless ruin. He is deeply involved in disease, physically and morally; but though suffering terribly, he is yet a living man, and a proper subject for therapeutic treatment; and, as already briefly mentioned, I am fully impressed with the belief that with untiring efforts in daily or very frequent visits, with the manifestation of deep sympathy to the drunkard, and kind and gentle reproof, advice and persuasion, very many intemperate drinkers would be recovered from the brink of ruin; joining with these means the use of such physical medication as the various conditions suggest, and with a constant view to sustain the idea of his manhood and hope of reform.

NEW COMBINATION FOR BOWEL AFFECTIONS.

By J. C. C. Downing, M. D.
Of Wappinger's Falls, N.Y.

In the October number of the New York *Medical Journal* (Vol. X, No. 1, October, 1869), there appeared an article by Dr. F. P. Mann, "A New Combination and its Specific Action in Certain Important Diseases."

Dr. Mann first called attention to the chemical and physiological properties and constituents of bile. Next he shows the effect upon the system of the presence of the abnormal or vitiated bile. He attributes cholera (Asiatic?), cholera morbus, cholera infantum, and diarrhœa, of the kind prevalent in summer, and dysentery, to the decomposed bile in the stomach and intestines. And he shows how his "new combination" acts under those circumstances. Dr. Mann's formula is as follows:—

℞. Aloes Socotrine, pulv.,
Potass. sulph., pulv.,
Sodæ bicarb., aa ʒj.
Carophyl., ʒss. M.
Div. in pulv. xij.

Three tablespoonsful of boiling water are to be added to each powder, and in cholera, cholera morbus, and cholera infantum, the mixture is to be swallowed whilst it is at as high a temperature as possible.

To adults the whole three spoonsful are given at one dose; if rejected by vomiting, repeat immediately. A powder is given every hour until bright yellow bile appears in the dejections. For drink, hot tea, with no milk or sugar, or ginger tea, in very small quantities, frequently repeated. To infants and children the dose of the solution or mixture is one teaspoonful every half hour, increasing the size of the dose according to the age of the child. In dysentery a powder

is to be given every three or four hours, and to children in proportion.

Dr. Mann claims that this combination is a specific in the treatment of the diseases above mentioned. In my practice I find the statement entirely correct; I believe it to be more of a specific than quinia is for ague. I no longer dread cholera infantum; I have not known of one fatal case of any of these affections where it has been used. Let me earnestly ask each physician who reads this to test the remedy. The rapidity with which it will frequently allay the nausea and vomiting present in many cases is so surprising that it must be witnessed before credit will be given to the statement.

The combination will be found useful in intermittents, preparatory to administering quinia; also in attacks of colic, with extensive gaseous distention of the intestines.

In conclusion, will not those who may be induced to use this formula report their experience.

A CASE OF PUERPERAL MANIA, WITH CONVULSIONS.

By J. H. Maynard, M. D.,
Of Unity, Maryland.

On the evening of the 10th of May last I received from Mrs. H. a request to send her a dose of morphia, for the relief of a very distressing headache which she was then suffering from. It was about the time she was expecting to be confined, so it was with reluctance that I complied, by sending morphiæ sulph., ¼gr., which I afterwards learned was not retained long enough by the stomach to have any constitutional effect.

About 12 o'clock that night another messenger came hastily, and requested me to go to her immediately, as she was supposed to be dying. When I reached there I found her a complete maniac, and a fine, healthy-looking boy in the arms of the nurse. Labor had been very rapid. The placenta was lying in the vagina, and was easily removed by a little traction upon the funis.

I could find no physical cause for her mania other than the rapid labor. She was a woman of considerable mental attainments, and she had been noted for her wonderful presence of mind and thorough self-control, having passed through some trying family difficulties, which fully developed these traits of character; and it was to the constant pressure of these difficulties that I was forced, in the absence of other causes, to attribute her sad condition. The human mind will often sustain its equilibrium under trials and difficulties which will cause a complete wreck of the physical being, while at other times we see a mind that we considered vigorous in the extreme succumbing under a load of difficulties, as if it were supporting the entire burthen; and this seemed to be Mrs. H.'s condition, for physically she was stout and vigorous, while mentally she was a complete wreck.

I gave her thirty-grain doses of brom. potass. every two or three hours for the next twenty-four hours, and it seemed to have no more effect upon her than so much wheat flour. The next night, about 10 o'clock, I began the administration of chloroform, and kept her more or less under its influence for the next five hours, but still she raved.

While under the influence of chloroform she was quiet, and would sleep for half an hour or more at a time, but as soon as its influence began to wear off her mental excitement would show itself again. After pushing this and the bromide as far as I thought safety to my patient would allow, I asked for assistance, and Dr. R. was sent for. He arrived about 2 o'clock that night, and shortly after his arrival, and while we were talking over her condition, and discussing the merits and demerits of certain drugs, we were hastily summoned to the bedside of the patient, and found her in a violent convulsion. After the convulsion had passed off she remained quiet. Complete relaxation was the result of the violent muscular action.

Heretofore she was all excitement; the unrelaxing effort of two attendants was necessary to keep her in bed; now she lay perfectly quiet; not a muscle was seen to move. The scene in that room beggars description. The family were gathered around, expecting every moment would be her last, while the physicians looked on, and felt how powerless they were to wrestle with the monster which then confronted them.

After a while the eyes were seen to open. I looked into them; they were clear and bright; no evidence there of mental aberration. Was she looking at me? Did she know me? Just then the eyeballs were suddenly jerked to one side; the chest heaved; the muscles writhed, and she was in another convulsion, more violent even than the first; and they continued to recur,

at intervals of about an hour, during the rest of the night, and until half-past 2 o'clock the next day, when they ceased. How they ceased, or rather what caused their cessation, I am rather at a loss for proof. I can but state facts.

Shortly after the development of convulsions the power of deglutition was lost, so that nothing could be conveyed into the system through that channel.

About this stage of the case an enema of salt water was administered, and repeated several times, which in the course of the morning produced tolerably free alvine dejections. About 9 o'clock that morning I saturated a small piece of linen with cream, and put the end of it in the mouth, and after a moment or two I noticed an effort of the pharyngeal muscle like swallowing. I renewed the cloth and cream, and I soon ascertained that after the cream had trickled down as far as the pharynx the muscles took it up and conveyed it into the stomach. The cream was then kept in the mouth constantly, in the way described, and after a while I noticed that as soon as the cloth touched the lips there was an effort made to seize and compress it between the tongue and the roof of the mouth. This looked something like improvement.

About 2 o'clock in the afternoon I found that the function of deglutition was sufficiently restored for me to venture to administer something again per os (I forgot to state that Dr. R. left early in the morning, having assured myself and the family that the case was a hopeless one, in which opinion I believe I fully concurred), and I gave another thirty-grain dose of brom. potass., which was followed in half an hour by the most violent convulsion of all. I will admit I felt a little uneasy about that time, for I feared that the potassium might have had something to do with it. But the next hour came and passed, and the next did likewise, without a convulsion. I began to breathe more easily. The third, and then the fourth hour passed, and still no more convulsive seizures.

All this time I was increasing the cream as her power of swallowing improved, and every teaspoonful seemed to add fresh vigor to her system. During the following night there were manifestations of mental improvement. The next morning her physical improvement was sufficiently advanced to admit of my leaving her for a short time, to attend to duties elsewhere, having been with her almost constantly for two days and nights.

The next morning Dr. R. met me there again, when we decided to adopt the expectant plan of treatment, and for the present give nothing but cream and beef essence.

In the course of the next two days she began to improve rapidly, and now her mind is quite as clear and active as ever it was, and her physical condition nearly as robust.

How much the bromide of potassium had to do with controlling the convulsions I am unable to say. The injections, by unloading the alimentary canal, may have relieved the portal circulation, and through the unloading of it and the ramifications of the abdominal aorta, the vascular film of the heart and the consequent pressure of its walls may have been removed, thus permitting the vena cava superior, the innominates, and the jugulars, to empty themselves more rapidly, thus relieving any cerebral congestion that may have existed. But I saw no *evidence* of this congestion; yet it may have existed to a sufficient extent to upset the balancing power, which was, no doubt, in a tottering condition, without presenting any external evidence of its existence. This is the only rational explanation I can give of the action of the enemas.

There was no more medicine given to her after the last dose of potassium, at 2 o'clock, except about three grains of calomel.

Ramsbotham says that "An attack of puerperal convulsions is one of the most frightful accidents that can happen to a patient under labor." And on page 427, while enumerating the causes of this dreadful disease, he says, "But the disease has often proved fatal without any organic lesion being evident on dissection, and without even the vessels being observed to be preternaturally full." Might not some pathological condition of the vaso-motor system of nerves have been the proximate cause of her maniacal condition, which culminated in convulsions?

July 1, 1872.

OBITUARY NOTICE OF JOHN BELL, M. D., OF PHILADELPHIA.

Died, on the evening of August 19th, 1872, of a chronic disease, that he bore with patience and fortitude, Dr. JOHN BELL, of this city, in the seventy-seventh year of his age.

He was the associate and friend of the physicians of the old school, now gradually passing away. Dr. Bell was several years older than most of his club which he leaves to mourn his loss, as, for instance, Condie, Hodge, Wood, Carson, Norris, and La Roche. We of the younger members of the profession had the impression that Dr. Bell was an older man, but the record states that he was born in Ireland, in 1796; his aged appearance was due to his feeble state of health, but his mind was the very opposite of his body, being clear, strong, and capable of much mental labor.

Dr. Bell came to this country wi h his parents, who settled in Virginia, in 1810, and he was their main support until their death. After seven years' residence he was able to save a sufficient amount to fit himself as a student of medicine, and he graduated as M. D, in the University of Pennsylvania, in the year 1817.

He was looked upon as a Virginian, by Professor Chapman, a native of that State, who took quite a fancy to the young graduate, and encouraged him to remain in Philadelphia, and he assisted this distinguished author by numerous contributions to *The Philadelphia Journal of the Medical and Physical Sciences*, which was commenced three years after he graduated, in 1820, and was edited by Drs. Chapman and Dewees. As the young doctor was not overpowered with practice, much of his time was given to his papers on Baths and Mineral Waters, which were afterwards embodied in a work under this title.

Dr. Bell lectured for many years on the Institutes of Medicine, and subsequently on Materia Medica, in the Philadelphia Medical Institute, a summer school connected with the University of Pennsylvania, of which Dr. Chapman was the honored founder. A reference to this institution, and how it became incorporated with the clinical teaching in the University, we referred to when writing a notice of the late Dr. W. W. Gerhard, who, with Dr. Jackson, was also attached to it. A somewhat painful controversy took place between Dr. Bell and the latter-named gentlemen, which was owing to certain promises held out that Dr. B. would one day become professor in the Institution he so devotedly worked for, on the death of his friend Chapman. Subsequently they again became friends, and all felt sorry for the war of words.

Dr. Bell felt aggrieved, and accepted a professorship in the Medical College of Ohio, but after two years' trial he resigned his position, and returned to his adopted city. This step was an unfortunate one for Dr. Bell, as he lost a very select practice, and was never able to regain it. After those two years other physicians whom he had himself recommended still retained many of his best patients, and although he recovered some, yet from his age and physical infirmities, he was not able to cope with the more active competitors in the field. He, therefore, devoted most of his time to literary efforts, not always very remunerative. As before stated, one of his earliest productions was

1st. *Baths and Mineral Waters.* Philadelphia, 1831.

2d. *Health and Beauty.* 1838.

3d. *Treatise on the Physiological and Moral Management of Infancy.* By Andrew Combe, M. D. With Notes and a Supplementary Chapter by John Bell, M. D. Philadelphia, 1840.

This was a most valuable work, and still holds its place, in spite of the numerous works upon the subject of infant management. The chapter by Dr. Bell contained an accurate statement, from personal observations, of the great and peculiar dangers to which infancy is exposed in the United States, showing that there must be harmony between the rules of health which govern the family, and those applied to the mother and child; also how to avoid infant mortality with the great extremes of climate, and the difficulties in consequence of it, with hints for the construction of houses so as to preserve equable temperature, summer hygiene, diet, air, and bathing. He then gives the chief diseases of children in Philadelphia and New York, and the proportion of deaths from them, winter hygiene, convulsions, and diseases of the brain, scrofula, and marasmus, and above all not over-exercise the brain of childhood. "Young persons of scrofulous diathesis," he observes, "are too often made the victims to the vanity of their parents and teachers by being urged to mental exercises beyond their powers, which sometimes throw them into irrecoverable idiocy, and at other times bring on dropsy or inflammation of the brain, which soon terminates their existence. With a knowledge of the tendency of children of this constitution to disease, it will

be the paramount duty of their parents to restrain in place of exciting them to intellectual displays; and to direct their attention to sports and active bodily exercise, until such time as the brain acquires more firmness and ability to perform its appropriate functions.

4th. *Regimen and Longevity.* Philadelphia, 1842.

5th. *Stokes' Lectures on the Practice of Physic.* Edited by John Bell. In the additions to this able work of Dr. Stokes, of Dublin, he showed his thorough knowledge of medicines, and so acceptably was this work received, that it passed through four editions, and was a text-book in many of our schools of medicine. (4th ed., Philadelphia, 1848.)

6th. *Baths and the Water Regimen.* 2d ed., 1849.

7th. *Mineral and Thermal Springs of the United States and Canada.* Philadelphia, 1855.

In his chief work on "*Dietetical and Medical Hydrology*," he gave a systematic view of the operations and effects of the different kinds of Baths on the animal economy, as well in its healthy as in its diseased state, enlarging on all the topics of his former work. It must be deemed strange, in medical literature, that although there were essays on the cold bath, on sea-bathing, on the warm bath, and on the vapor bath, and sometimes on two of these in the same volume, yet, until the appearance of the treatise of Dr. Bell, there was no one in the English language in which they were all severally considered, and their resemblances, contrasts, their successive and alternate uses, pointed out.

It will be seen that Dr. Bell was an industrious writer, and that his work filled a want in our medical literature.

Besides those works already enumerated, he edited, with Dr. D. F. Condie, an essay on *Cholera*, and numerous valuable papers, in the *Medical Examiner*, *American Journal of the Medical Sciences*, and in the MEDICAL AND SURGICAL REPORTER. He was President of the Philadelphia County Medical Society, and his address on his *Retirement* was an elegant and scholarly production. He gave this society much of his valuable time, and entered with zeal and interest into its discussions, as may be seen in the volume of published transactions, edited by its late indefatigable Secretary, William B. Atkinson, M. D., in which Dr. Bell has given a most valuable practical paper on "Variola, its Modifications and Treatment," derived from personal observations while one of the physicians of the Small-pox hospital on Green Hill, in the epidemic called "great," of 1823-4, which must now be called small compared with the epidemic of 1871-2. In this paper he makes the honest confession which all judicious physicians must do, "That comparing his former treatment (1823-4) with his recent experience (of 1860) he had little to add to inspire confidence in any therapeutical course or particular remedy. In mild cases of a distinct variety, the cooling regimen, fresh air, cool and cold drinks, aided sometimes by a mild aperient when the eruption is vesicular, the question comes up, Is abortion or jugulation of small-pox possible? Some have answered in the affirmative, but without adequate proof to sustain the assertion." In the confluent cases he resorts early to a cordial and sustaining treatment. Oil of turpentine, with camphor mixture and quinine, he found of service in the stage of secondary fever with much prostration and delirium, simulating, in fact, typhoid fever. In laryngeal and bronchial complications, with febrile excitement, calomel and Dover's powder in divided doses, a grain or half a grain of the former and three of the latter, combined with chalk, he has found serviceable. For a gargle he found nothing so easily made and answering all indications, as a solution of common salt, one tablespoonful to half a pint of water, to which is added two tablespoonsful of vinegar. For external treatment he early used cold effusion and sponging,. In some cases the early and continued use of "Lugol's compound solution of iodine, of the stimulating" strength, has done some good in impeding the formation of pustules and so far lessening pitting, but he has no faith in silk masks, gold leaf on the face, unguents, simple or mercurial, or cauterization with nitrate of silver; indeed, he observes, "if the results of these trials of various substances to the face were faithfully given, we would have a singular diminution of the number of cases in which they are said to have been successful."

We trust we shall be excused for making this long extract, on the plea that the subject is one of great interest to the profession of this country.

Dr. Bell was a member of the American Medical Association, and of the Pennsylvania Medical Society, Fellow of the College of Physicians of Philadelphia, and of the American Philosophical Society, to all of which institutions he gave much of his time.

Dr. Bell leaves a wife and daughter to mourn his loss, and his medical brethren will miss his valuable aid in advancing general and medical science. L. T.

SPINAL IRRITATION.

By Dr. W. H. Phillips,
Of Ohio.

(Read before the last Meeting of the Northwestern Ohio Medical Association.)

It is proposed in this paper to summarize such ideas as I have been able to obtain from modern writers, together with my own observations upon the symptoms, causes, pathology, and treatment of Spinal Irritation.

I am fully of the opinion that this disease is of frequent occurrence in all this portion of the country which we represent; perhaps much more frequently met with than recognized. And this is not remarkable when we consider the fact that it has hardly yet received a sufficient recognition, even among our teachers, to obtain a place in our systematic works on the practice of medicine. It has either been passed over in silence, or barely and even sometimes slightly alluded to by our authors.

In every genuine case of spinal irritation I believe we can find spinal tenderness in some portion of the vertebral column. Although it may not have been complained of, or even observed by the patient, yet upon a thorough and careful examination of, and pressure upon each of the spinous processes and intervertebral spaces, we will not only discover tenderness under pressure upon the superficial parts, but sometimes in the deeper seated tissues.

This tenderness is extremely variable in character, requiring strong pressure to develop it in one case, while in the next it may be so exquisitely tender that the lightest touch is almost insupportable. It is more commonly confined to one or two of the vertebræ. It may be found in one or more localities, or it may indeed be noticeable for the entire length of the cord. In a certain portion of cases we find in addition to the tenderness, which is external to the cord, and manifestly located in the tissues overlying the cord, a deeper seated pain and tenderness, which seems to be located in the cord itself, and is capable of being developed by percussion. Occasionally it may be developed in portions of the cord where the overlaying tissues are not tender, but it is, as a rule, situated at or near the points of external tenderness.

The eccentric phenomena which characterize this disorder always bear a marked physiological and pathological relation to the local tenderness, and are usually found in parts not very remote from the real lesion.

When the irritation exists in the cervical region we may expect vertigo, cephalalgia, soreness, irritability of disposition, and a morbid state of the emotions, as functional derangements, as perversions of the sensibilities, numbness, or neuralgias about the face, head, neck, or upper extremities.

If the irritation is in the dorsal region we meet with a derangement in the functions of the viscera contained within the thorax and abdomen, as palpitation, fits of apprehension, sinking, globus hystericus, and many other symptoms usually denominated hysterical.

When it is found in the lumbar region we are certain to find the derangements of functions and sensation in that portion of the body which receives its nervous supply from the lumbar and sacral regions, as ovarian and uterine derangements, irritation of the bladder, constipation, seminal weakness; or with them we may find neuralgias of those parts, or of the lower extremities. In short, it may be safely stated that an irritation at the posterior roots of any given nerve or pair of nerves will be manifested not only by derangements of the normal sensations, but of the functions of the parts supplied.

Comparing the phenomena of this disease with the facts just stated, we arrive at the conclusion that the phenomena of spinal irritation are dependent upon a deficient quantity, or upon an impaired quality of the blood circulating in the posterior column of the spinal cord. This further appears from the following considerations:

1st. It is a recognized principle in pathology that an irritation at the root of, or even at any point upon the trunk of any given nerve is manifested by a disturbance of its functions, or sensation, at its terminal branches.

2d. We find anæmia giving rise to irritation in many instances, when mistake cannot well occur. This principle is illustrated by the state of the heart in general anæmia; by the unnatural state of erethism in exhausted generative organs; by the violent headache of cerebral anæmia, and their prompt relief by stimulants and position.

3d. It will be observed that the subjects of spinal irritation are almost invariably enfeebled by general anæmia or neurasthenia.

4th. The phenomena of spinal irritation are not of that grave and fatal character which usually result from all other spinal diseases. Moreover, by our better understanding and improved methods of diagnosis, we are now able to exclude all the grave conditions with which it might be confounded, or which might be supposed to stand in a causative relation, such as spinal congestion, myelitis, or spinal meningitis.

Finally. If there remains any doubt about the correctness of our diagnosis, it may be speedily settled by experimental treatment, for the means used to increase the flow of blood to the spinal cord improves all cases of spinal anæmia, while the means used to diminish it invariably aggravates the symptoms.

The causes of this disease, like most general diseases, may be considered as predisposing and exciting. Of the predisposing, sex is incomparably the greatest. My information upon this point leads me to the opinion that its greatest frequency in the female sex is as ten to one of the male. It may occur at any period of life from youth to old age.

Of the exciting causes, their name is legion, and they can only be enumerated by classification.

The 1st class of causes are those diseases which tend to exhaust the vital energies of the system, or which tend to impair the quality of the blood, as typhoid fever, dysentery, chronic diarrhœa, diphtheria, exhausting hemorrhages, abortions, leucorrhœa, and prolonged lactation.

2d. Those which tend to exhaust the nervous energies, such as grief, mental anxiety, prolonged and severe mental labor, insomnia, and excessive venery.

3d. Those which impair the processes of nutrition. The malarias, toxicants, cachexias, and local diseases of the stomach and bowels, or of the spleen; in short, anything that interferes with the processes of hæmatosis.

Complications.—The complications of spinal irritation may be various in character, and of frequent occurrence. That the lack of blood supply, proper nutrition, and functioning power, may extend to the antero lateral columns, I have had ample proof. This condition is manifested by both the sensitive and motor filaments of the nerves. I have several times met with all the symptoms of spinal irritation, with numbness and want of power both in the upper and lower extremities, or in one lateral half of the body. That it is sometimes complicated with spinal congestion I think may be safely admitted.

Prognosis.—The prognosis in complicated cases is generally favorable. By the steady and persevering aid of the proper means, cures may be promised with much certainty. To appreciate fairly the prospects of a case, a careful estimation of all the factors which have induced the disease is to be had. The age, the circumstances of the patients, and the probabilities of their being able to comply with such conditions as will secure a complete removal of the cause, are important considerations in making a prognosis.

Treatment.—There are three leading indications to be filled in the treatment of this disease.

1st. To remove the cause.

2d. To restore the general tone of the system.

3d. To improve the circulation and nutrition of the cord at the diseased part.

It is of the most essential importance to discover the real cause, in order that measures for its entire removal may be set on foot as a preliminary. If the patient gives a history of hemorrhages, leucorrhœa, prolonged lactation, or any other exhausting discharge, measures must be adopted for their special treatment and removal, in order that this exhausting flow of the elements of vitality may be directed to their proper channels.

In the fulfillment of the first indication, namely, the removal of the causes, we enjoin rest; not absolute, but in a recreative sense; the strict avoidance of fatigue or excitement.

The second indication is best accomplished by the use of such general tonics as have proven most efficacious in our hands. Quinine, iron, and cod-liver oil, are con-

fessedly at the head of this class of remedies.

In addition to this class of direct tonics, all who have had opportunity for observation agree that alcoholic stimulants are among the most efficient means of treatment at our command.

In the accomplishment of the third indication somewhat greater skill and care is required. To determine a greater flow of blood to the spinal cord, and thereby promote its nutrition, a number of special remedies have been used with success. Of these, strychnine, phosphorus, and zinc, are worthy of special mention.

I have used with great satisfaction a combination of these remedies in the form of the phosphide of zinc in combination with nux vomica.

There is another agent which I have used with very gratifying results, namely, the constant galvanic current. It is claimed by experts that this agent is capable of producing an increased or diminished supply of blood to the cord at will, according to the direction of the current used.

The next means for the accomplishment of this object is by small and frequently repeated blisters.

This outline embraces the chief remedies at our command for the treatment of this peculiar disease.

Medical Societies.

Oneida County (N. Y.) Medical Society.

The annual meeting of this Society was held Tuesday, July 9, 1872, Dr. Wm Russell, President.

The meeting was called to order by the President. The minutes of the quarterly meeting were read and approved.

Dr. Bissell stated that he had been requested by Dr. John P. Gray, Superintendent of the State Lunatic Asylum, to ask the Society to hold its next quarterly meeting in that institution. The invitation was accepted.

Dr. Judson B. Andrews presented a carefully written report of a case of excessive hypodermic use of morphia. The patient, a young woman, while insane, and after having taken over two thousand hypodermic injections, had thrust into her body at every possible place three hundred sewing needles. These last had been removed at the asylum, and the photograph exhibiting them was shown.

Dr. Wm. Russell then read an address on the topic

"Is Woman adapted by Nature and Social Position for the arduous duties of the Medical Profession?"

He remarked:—

So far from imposing artificial restrictions upon women in the acquirement of medical knowledge, I would say: Throw open our college doors; remove every obstacle in their way, and let them toil through medicine and philosophy. And as Huxley, eminent as a biologist and philosopher, playfully remarked, "Let us have sweet girl graduates by all means; they will be none the less sweet for a little wisdom; and the golden hair will not curl less gracefully outside of the head by reason of there being brains within." Let them have a fair field; but let them understand, as a necessary correlative, that they are to have no favor. Let nature alone sit high above the lists, and I do not hesitate to predict that they will find their proper sphere is not that to which they would aspire. Nature's old law will not be repealed; and no change of dynasty will be effected. I see nothing for it but the old division of humanity into men potentially, or actually fathers, and women potentially if not actually mothers, each bearing the burden incident to their natural spheres in the battle of life; and I fear that so long as maternity is the lot of woman, she will be fearfully burdened in the race. She cannot, in justice to herself, treat with indifference her maternal instincts; they are a law unto her, demanding full obedience.

This question is clearly connected with those relating to their functional, domestic and industrial positions. The question is not as to the relative intelligence or virtue of the two sexes, but whether the practice of medicine is or can be woman's sphere.

Her advocates claim there is a peculiar fitness in the female intellect for the duties of the profession; that it is clearer and quicker in its perceptions; that their instinctive intellectual insight is sharper, their passionate tenderness and every excellent character, whether mental or physical, is superior to that of the average man, both in quality and quantity, but they refrain from telling us that woman is by nature more excitable than man; more prone to be swept by tides of emotion proceeding from hidden and inward, as well as from obvious and external causes. They are also more impulsive and not so reflective as men, and inductive reasoning is not their chief excellence. The disqualification, however, is not one of intellect, but of position, or at least of intellect only so far as intellect in regard to special functions may be unfavorably influenced by position.

The question is not about the abstract capacity of women, but as to their capacity under existing circumstances, and the possibility of their assuming the duties of the physician consistently with the unity and happiness of their families. We are told, indeed, that there is no reason why domes-

tic harmony should be disturbed by this change of position; but what man in any of the walks of life would regard with pleasurable emotions the departure of his wife or daughter from his house at the hour of midnight, to traverse the dark streets of the city with a stranger, to a strange place?

I am aware that human nature possesses a wonderful degree of power of adaptation to circumstances, but I doubt whether any of you could adapt yourselves with ease and comfort to such unnatural conditions. Would not the harmony of any ordinary marriage be violently disturbed by such a practice? While the family subsists, let all those who regard the integrity of its relations as valuable to the State and society shrink from exposing it to such a strain.

There is a field for woman's work which is closely allied to that of medical practice; wherein many noble women, with a spirit of self sacrifice worthy of all commendation, are devoting themselves to the alleviation of human suffering. I speak of nurses, in the fullest signification of the term, and especially of hospital nurses. For this field of labor women are well adapted; their quick perceptions, their intellectual insight and their tenderness, all in harmony with the requirements of this position, fit them above and beyond all question, as by heaven's ordination, for this work.

No physician can pass through the wards of our State Lunatic Asylum or of St. Elizabeth's Hospital, in this city, without being deeply impressed with all I have said respecting the capacity of woman for the noble work. Happy, cheerful and contented in their ministrations, no watching too arduous, no duties too obnoxious, and no conditions but meet with their ready, skilled and cheerful attentions. What spectacle more pleasing does this earth afford than a happy woman contented in any or all of the positions that are in harmony with herself; transforming the briars and thorns of life into the roses of a paradise as by the magic of her touch. They diffuse a cheerful glow around them as they pursue the even tenor of their way. They have the jewel of contentment, whose value is above the philosopher's stone, for without seeking the baser exchange of gold, which may purchase some sort of pleasures, they convert everything they touch into joy. What their condition is makes no difference; they may be rich or poor, high or low, admired or forsaken by the fickle world, still happiness is in their hearts, and makes them radiantly beautiful.

Nominations.

After dinner the Committee on Nominations made the following report. The gentlemen named were unanimously elected:—

President—Dr. Robert Frazier.
Vice President—Dr. Walter Kempster.
Secretary—Dr. Edwin Hutchinson.
Treasurer—Dr. William L. Baldwin.
Librarian—Dr. Alonzo Churchill.

Dr. Hutchinson read the following paper

"On the Use of Atropine in Some Diseases of the Eye."

It is often of as great service to us as practitioners of medicine to call our attention strongly to an old remedy, as to bring forward some new discovery with all the wonderful results that it may be expected to perform. Belladonna has been used in medicine for hundreds of years, and has been applied to the eye for various purposes almost as long. Its power of dilating the pupil, and quieting pain about the eye in various inflammatory conditions, is known to all students of medicine. This property makes it of most valuable service. Without availing ourselves of it, we could scarcely hope to cure many of the cases which now recover. Notwithstanding that these facts are well known, yet a vast number of persons become blind because the practitioner fails to use it in time. It will be my aim to induce others to keep this in mind, and to show how much good may be done, and how many poor, suffering creatures may be saved to usefulness by the prompt use of belladonna or its alkaloid, atropine.

There are large numbers of individuals in every community who have had iritis, and in consequence thereof have had the margin of the pupil adhere to the anterior capsule of the crystalline lens, either at one or more points, or in a complete circle. These attachments are very often sufficient to destroy the eye. The pupil contracts and dilates under the stimulus of light, and constantly pulls upon the point of adhesion. Thus a fresh inflammation is excited; another iritis follows, and very likely the pupil is closed by lymph, and the whole iris glued fast to the surface of the lens. When the peculiar pain and sensibility to light, with the objective symptoms which accompany iritis, come before us, no time should be lost in completely dilating the pupil. Use a strong solution of the sulphate of atropia, four grains to the ounce of distilled water, and drop it into the eye every half hour until the iris is a mere ring, and keep it dilated with four applications daily until the inflammation subsides. No harm can result from this course, nothing but good. After the patient recovers, he has a good eye, with a movable pupil, and you will be well rewarded for your attention. Ulcers of the cornea should never be treated, as used to be done altogether, with strong astringents or caustics. Keep the light away, and use atropia daily. The tension of the ball is relieved, tender corneal wens that are exposed by the ulceration are put to rest, and your patient is made comfortable. Should the ulcer slough rapidly and enter the anterior chamber, allowing the aqueous humor to escape, there will be less danger of prolapse of the iris and that ugly condition of things produced known as anterior synechia. We have all seen these cases where the iris is attached to the cornea, and in every move-

ment of the pupil drags upon the cicatrix. These eyes are prone to attacks of recurrent iritis with all their sad consequences.

In herpetic or diffuse inflammations of the cornea, atropine in strong solution is of great value. You see a raised vesicle appear at the corneal edge, with a rosy zone of vessels leading fan-like over the sclerotic conjunctiva. Use your atropine at once. The cloudiness from the interstitial deposit in the corneal substance may spread quite over its surface, and so make your patient perfectly blind. Do not despair, but apply your atropine freely, and with the accompanying treatment you will have the satisfaction of having your patient see again, and the eye to progress through its otherwise painful course in comparative ease.

We all have occasion to remove bits of steel and foreign bodies of various kinds from the cornea. These wounds are quite painful, and should be quieted with applications of the sulphate of atropia.

In catarrhal conjunctivitis, where astringents are commonly used, with the effect of increasing or keeping up the inflammation, atropine is the best remedy. A drop of a solution of two grains to the fluid ounce of water should be applied four times daily, and the eye protected from the light. You will be astonished to find how soon such cases recover. Should the acute stage pass, and the discharge still continue from the conjunctiva, of course astringents are called for.

It sometimes happens that posterior synechiæ are formed in old cases of iritis. If a very strong solution of atropine is used it is quite possible to tear them asunder, and give the patient in some instances a movable iris. In order to make a diagnosis in this condition it is essential to use the mydnatic at first, and the movable part of the iris will dilate and leave the tongue-like attachment in plain view.

Eyes are occasionally seen which are useless because of a central opacity of the cornea, or by central nuclear cataract, or central capsular cataract. A weak solution of sulphate of atropia, one-twelfth of a grain to the ounce, will dilate the pupil and let in light to the retina, without paralyzing the accommodation. Before operating for cataract, whether by the needle or extract, or before making an iridectomy, it is necessary to put atropine in the eyes. Perhaps the most singular power this agent possesses is that of paralyzing the accommodation. If the mobility of the crystalline lens is prevented we cannot focus for near vision, and all things are blurred except those at a distance. In a few hours after a strong solution of atropine has been dropped into the eyes the crystalline lens ceases to be acted upon by the ciliary muscle, and your accommodative power is lost. In cases of hypermetropia, where the antero-posterior diameter of the eyes is shorter than the normal standard, the lens has great additional work to do, and finally becomes exhausted. Paralyzing the ciliary muscle with atropine, and using glasses, we find out exactly the degree of defect, and, if necessary, remedy it with spectacles. Those who have astigmatic or irregularly curved eyes are under a constant strain, the lens endeavoring to make up for the irregularity by alterations in its own curvature. These eyes must be put at rest with atropine before anything like accurate corrections are made. Many cases of asthenopia or weak sight are cured by the aid of this invaluable drug. Occasionally one meets with a case of spasm of the accommodation. Here the ciliary muscle acts irregularly and the miserable patient sees nothing distinctly except at rare intervals. Atropine gives a perfect rest to the sufferer, and after a short time the effects pass away and all is well. There is some danger attending the use of this remedy, as might be expected of so poisonous a drug. Many surgeons never give it to their patients, but apply it themselves. This is an unnecessary precaution, for with care no evil results follow. Sometimes a small portion flows with the tears through the canaliculi into the nasal duct and so enters the body through the nose. This is prevented by bidding the patient lean forward after it has been applied, so that the tears may run down the cheeks. Even should dryness of the throat be noticed, the remedy can be stopped before it has power to do further mischief. Occasionally atropine is not tolerated. Those who do not bear the remedy have great conjunctival injection and pain and all the symptoms are rendered worse. For these patients a strong solution of extract of belladonna has to be used.

With the hope that what has been said may lead some to keep by them and use early a solution of sulphate of atropia in the conditions I have so briefly and so imperfectly sketched, I thank you for your attention.

The Society adjourned to meet the second Tuesday in October, at the State Lunatic Asylum.

The Northwestern Ohio Medical Association.

The seventh annual meeting of this Society convened June 6th, 1872, Dr. BALLARD, President, in the chair. The opening address was delivered by Dr. A. Hurd, of Findlay.

S. A. Baxter, of Lima, Secretary, read the minutes of last meeting, which were approved. On motion, a copy of the address of Dr. Hurd was requested to be filed with the Secretary.

HONORARY MEMBERS.

The following gentlemen were elected as honorary members of the Association: Alva Evans, Bowling Green, Wood Co.; B. Rawson, Findlay, Hancock Co.; L. Firmin, Findlay, Hancock Co; A. J. Scott, Loudonville, Ashland Co.

ELECTION OF OFFICERS.

The Convention next proceeded to the election of officers to serve for the ensuing six months, with the following result:—

President—H. D. Ballard, Findlay.

1st Vice President—J. M. Shoemaker, Napoleon.

2d Vice President—S. B. Hiner, Lima.

Dr. W. H. Phillips read an essay on Spinal Irritation, which we print elsewhere.

It was decided to hold the next semi-annual meeting at Lima, on the first Thursday in December, 1872.

Franklin County, Pa., Medical Society.

The quarterly meeting of the Franklin County Medical Society was held in Waynesboro', on Tuesday, July 2d. The meeting was called to order by President Hunter, at 1.30 P. M. Dr. Montgomery was appointed Secretary *pro tem.* The minutes were read and approved. The report of the delegates to the American Medical Association was made by Dr. Montgomery and received.

After a discussion of numerous medical topics, interesting to the Society, it adjourned to meet at Mercersburg, the first Tuesday of next October, at 7.30 P. M.

Wisconsin State Medical Society.

The Wisconsin State Medical Society held its regular annual session in Fond du Lac, beginning on the 19th of June, and continuing three days, Dr. J. FAVILL, its President, in the chair.

The attendance was good, and the number of applicants for membership showed a gratifying appreciation of the estimation in which the Society is held by the profession of the State.

An address of welcome was given by Dr. E. L. Griffin, which was followed by some necessary routine work.

Reports of Standing Committees were rendered as follows:—

On Surgery several papers were read, and in part illustrated, among which were the following:—

By Dr. Meacher, a report embracing four subjects: 1. A Pyogenic Ovarian Cyst. 2. Protracted Use of Chloroform. 3. Resection of Tibia and Fibula in a Viciously United Fracture. 4. A Case of Senile Gangrene.

By Dr. Senn, a lengthy and valuable report on Necrosis and its Treatment.

On Practice, papers were presented as follows:—

By Dr. Manley, one touching on the Pathology and Therapeutics of Diphtheria, Diabetes, Rheumatism, Cerebro-spinal Meningitis, Epilepsy, Influenza, and Indigestion. By Dr. Ferrin, on Small-pox and Vaccination, and by Dr. J. G. Meachem, on Encephaloid Cancer.

On New Remedies, an elaborate paper by Dr. J. J. Brown, on Hydrate of Chloral, led to a discussion which displayed diversity of opinion and independent thought.

On Diseases of the Eye, Dr. E. W. gave a paper on Iritis.

After these came reports of Special Committees, and voluntary papers, among which were the following:—

By Dr. D. C. Davies, two papers, one on Gynæcology, and the other, A Successful Case of Ovariotomy.

By Dr. C. Linde, on Diseases of the Skin.

By Dr. Waterhouse, an essay on Enervation.

By Dr. T. Nichols, a paper on the Laryngoscope, with exhibition of different varieties of the instrument.

By Dr. J. C. Davis, a report of a case on Paracentesis Thoracis in a Child; recovery.

By Dr. Wigginton, on Hydrate of Chloral.

By Dr. Witter, two papers entitled Urethral Stricture and Urinary Fistula, and Cerebro-spinal Meningitis.

By Dr. Marston, a history of three cases of Placenta Prævia.

By Dr. Conant, on Cerebro-spinal Meningitis.

By Dr. Brett, on Compound Fracture, with loss of an inch of the Tibia, and subsequent recovery, with use of the limb.

By Dr. Cory, on the Use of Anæsthetics.

By Dr. Brown, two papers entitled, Suggestions on the Use of Anæsthetics in Midwifery, and Intussusception.

By Dr. Brenton, a case of Post-partum Hemorrhage.

By Dr. J. E. Davies, on Correlation of Forces in Physiology and Medicine.

By Dr. Vivian, a case of Fractured Skull with Depression and its Consequences, himself being the subject.

By Dr. Griffin, a case of Cæsarian Section.

The foregoing papers and reports were prepared with manifest care, were well received, and will appear in full in the published "Transactions," together with an obituary notice of Dr. Mason C. Darling, the first President of this Society, by Dr. Griffin; also a biographical sketch of Dr. J. H. Hyde, by Dr. Ferrin.

During the afternoon session of the second day President Favill gave his annual address on "The Relation the Profession holds and should hold toward the Community," an able and eloquent production.

During the session several resolutions looking to the advancement of medical science in this State were adopted, of which the more important were, one memorializing the Legislature for the appointment of a State Board of Health, in accordance with a movement originating in the American Medical Association; also one in reference to the examination of applicants for the study of medicine, as regards their educational attainments, with a view to raising the standard of scholarship. A resolution was also adopted authorizing the Secretary to hold copies of the published "Transactions" *for sale* at $1.00 per copy.

The election of officers for the ensuing year resulted as follows:—

President—Dr. H. Van Dusen, of Mineral Point.

1st Vice President—Dr. E. L. Griffin, of Fond du Lac.

2d Vice President—Dr. John Dickson, of Allen's Grove.

Secretary and Treasurer—Dr. James T. Reeve, of Appleton.

Censors—one year, Dr. D. Mason; two years, Dr. N. Dalton; three years, Dr. J. K. Bartlett, and henceforth one to be elected annually, to hold his office three years.

The following Standing Committees were appointed:—

Arrangements—Drs. J. K. Bartlett, Marks, and Johnson.

Surgery—Drs. Dalton, Palmer, and Brett.

Practice—Drs. Waterhouse and Bell.

Obstetrics—Drs. Whiting, Marston, and Armstrong.

Pathology—Drs. E. H. G. Meachem, Brown, and A. Clarke.

New Remedies—Drs. Senn, William Fox, and Hall.

Medical Education—Drs. J. G. Meachem and Mason.

Diseases of the Eye—Dr. E. W. Bartlett.

Ethics—Drs. Strong, Russell, and Marks.

After the appointment of delegates to the American Medical Association, and to the various neighboring State Medical Societies, this Society adjourned to meet in Milwaukee, the third Wednesday of June, 1873.

J. T. R.

Editorial Department.

Periscope.

Hour-glass Contraction of the Uterus.

The Cincinnati *Medical News*, February, 1872, contains an instance of this complication, reported by Dr. A. E. Duncan, of West Milton, Ohio:—

I have met with two cases in less than ten years' practice. The first case was that of Mrs. ——(Oct., 1863), in her third accouchment. In her first two she had given birth to healthy living children at full time. In *this* it was an abortion, about the beginning of the fifth month. The patient states that the "water broke some three weeks ago," and that the "water continued to flow at times for a few days." Patient had more or less pain daily during those three weeks, but not so as to prevent her from attending to her daily work. Evidently the membranes (*chorion* and *amnion*) had ruptured, and the liquor amnii made its escape.

At time of parturition the fœtus was readily delivered. Placenta retained; which could not be felt without introducing the hand into the uterus, which was not at first done. There were no pains to indicate an effort of the uterus to expel its contents. Administered vinum ergotæ. Made slight extension on the cord, which easily gave way at the placental attachment. At this time there was some hemorrhage, which was followed by profuse flooding. The hemorrhage was now of such a character that the life of the patient was in serious jeopardy if not at once relieved.

The position of the patient required that my left side should be toward the bed, hence the introduction of the left hand into the vagina; thence into that part of the uterus that had so recently contained the fœtus, when the hour-glass condition of the uterus was discovered, the uterus being steadied by my right hand, through the abdominal wall. The centre of hour-glass was about one inch in diameter, and slightly dilatable. Two fingers were passed into the fundus uteri, where the small placenta was imprisoned, which was at once brought away without difficulty. There were no utero-placental adhesions.

The *cause* of this irregular contraction was produced either by the ergot, or from the position of the placenta and fœtus (the one at fundus, the other at cervix uteri), and the length of time since the escape of the liquor amnii. I am inclined to the *latter* of the two causes as *the cause*.

The second case. Nov. 15, 1871, was called nine miles in the country to see Mrs.—— in her second confinement, at full time. There was a vertix presentation, and first position, the first stage of labor lasting eighteen hours. The os uteri soft and dilatable early in the labor. The last eight hours of the first stage the pain had almost ceased; patient feeling quite comfortable. Why not administer ergot? There were two reasons why I did not. The right side of the os uteri was prone to remain forward anterior to the fœtal head; and there was a more than ordinary prominence in the epigastric region, which were the only things unnatural in the case, except delay.

The second stage of labor was eight hours. The last three hours of labor the patient was weary, and felt exhausted after each pain. I gave during this time spir. vi. gallici, and ext. ginger, with good effect. At the end of the twenty-sixth hour of labor the patient was delivered of a living male child, weight eleven pounds. The patient was allowed to rest a few minutes in the horizontal position. Slight uterine pain occurred, and an effort was made to remove the placenta. By passing the hand into the vagina so as to allow the finger to enter the uterus, it was found

to be empty as far as could be thus explored, save the cord. With this fact ascertained, and the peculiar elongated condition, as observed through the abdominal wall, the hour-glass condition of the uterus was at once anticipated. Without further delay I thoroughly anointed my right hand, and gently passed it into the vagina, and thence into that part of the uterus from whence the fœtus had been recently expelled, leaving my left hand free to make extension on the cord as I might desire, and having the uterus steadied by a female assistant. The central contracted portion was rigid, and about one and a half inches in diameter. In passing the finger between the placenta and uterine wall no adhesion could be found within the finger's length. No attempt was made to dilate the central hour-glass for the introduction of the entire hand. But by the use of two fingers within the fundus uteri, and extension by the cord, a small portion of the placenta was soon brought through the passage; and by a continued stepping motion of the two fingers, and traction on the cord, a rotating motion of the placenta was effected, and a speedy delivery of the imprisoned placenta was accomplished.

Beneficial Effect of an Over-dose of Lye in Membranous Croup.

The following singular incident is reported in the *Medical Archives*, by Dr. J. B. WALKER, of Baden, Mo.: —

I was in attendance on a patient, aged six years, laboring under a severe attack of membranous croup. He was stout, and previous to the present sickness in robust health. The disease had commenced two days previous, and had resisted the ordinary treatment instituted against it. The application of caustic to the larynx, cold applications externally, emetics, and nauseants exhibited liberally and attended with copious discharge of fibrinous exudations, had all failed to arrest its onward march; and as I left the little sufferer late in the evening of the second day of his attack my hopes of his recovery were not of the most brilliant character. Some two years before I had attended a child of the same parents with the same disease, and with a fatal result, and I considered this one as destined to go the same way. His stridulous respiration, the blueness of the surface, with the drowsiness fast deepening into stupor, all attested the approaching end.

Towards midnight I was hurriedly sent for, and found on my arrival that, by mistake, a quantity (they said a teacupful) of lye, diluted to some extent, had been given him by one of the neighbor women, who supposed it was water which had been left standing in the room. He must have gotten a rather heavy dose, for I found him with mouth and tongue and lips very much swollen, and a steady flow of mucus from his mouth and throat—in fact, a steady stream—with a burning in the line of the œsophagus and stomach. As an antidote I gave him frequently small doses of sweet oil, and to my surprise his croupy symptoms began to pass away, and with the exception of a diarrhœa that was a little troublesome, he recovered without a bad symptom. I am confident he owed his life to the stimulating effect of the potash, causing an excessive secretion from the mucous surfaces and overcoming the inflammatory congestion.

Post-Partum Inflammation and its Treatment.

In the St. Louis *Medical and Surgical Journal*, February 1872, the following case and remarks by Dr. EDWARD MONTGOMERY, of St. Louis, is recorded for the purpose of illustrating the treatment followed:

Mrs. S., 37 years of age, a primipara, taken in labor on the evening of the 20th of January, 1869. A midwife was in attendance, until three P. M. the next day, at which time the membranes ruptured and a large loop of the umbilical cord protruded from the vagina. I was then sent for and found about fifteen inches of the prolapsed cord in the vagina, the fœtal head still high up, and seemingly resting on the superior margin of the pubic bones. The labor pains had been very severe since their commencement, the patient appearing to suffer great torture at the region immediately above the pubis; the pains in this region being sharp and lancinating. Her pulse was quick, hard and wiry, and there was considerable tenderness and fullness in the lower part of the abdomen, occasioned most likely, in great part, by retention of urine. I caused the patient to get up on her feet in the bed, then to stoop forward with her head down on the bed so that her pelvis was well elevated, when I had little difficulty in returning the cord over the child's head; I kept her in the same position until she had a strong expulsive pain, when the head entered the superior strait so as to prevent the egress of the funis again; she now urinated freely and I thought I would have little more difficulty with the case; but I was mistaken, for although the pains continued for two hours with great violence, I believed that the child would not be born alive without instrumental assistance; so I administered a warm salt and water injection, which thoroughly emptied the rectum, and applied the forceps and delivered a healthy male child, weighing about nine pounds.

The placenta came away without any trouble, and the sanguine discharge was normal, but the patient seemed feverish and irritable, the pulse still quick and wiry, and the abdomen tender on pressure. I wrote a prescription for five grains of the sulphate of morphia, half an ounce of gum arabic, and two ounces of spearmint water; of this solution the patient was to get a teaspoonful immediately, to be repeated every two or three hours if pained or very restless. I also prescribed twenty grains of the sulphate of soda in a tablespoonful of sweetened peppermint water to be given every three hours,

and a piece of flannel saturated with turpentine and oil placed over the abdomen under the binder. I directed the room to be kept at an even temperature. I visited my patient early next morning and found her still feverish, that same hard, quick, wiry pulse, great thirst, anxious and restless, with much abdominal tenderness. The after pains would come on very severe if the morphine was omitted for a longer period than two hours. I now ordered three drops of Norwood's tincture of *veratrum viride* to be given every hour and a half until the pulse came down to 80, or until nausea ensued; the bisulphite of soda to be continued, the morphine also to be given in sufficient quantities to keep the patient easy, and the continual application of the turpentine stupes to the abdomen; and light nourishment. Although the patient had urinated, and the uterine discharge was free and natural, I injected a weak solution of chlorinated soda, warm, per vaginam.

I visited the patient again in the evening and learned that the medicines had been given regularly all day as directed; she had taken some seven or eight doses of the *veratrum viride* and was now nauseated, and had the pulse lowered to near 80; I directed it to be omitted, but to resume its use if the skin became hot and dry and the pulse became much accelerated. The skin was now moist, the thirst abated, and the abdominal tenderness not so great. I directed the continuance of the bisulphite of soda, and enough of the solution of morphia to insure repose, and also prescribed five grains of quinine every three hours as long as the fever kept down. At my visit on the following morning there was still some abdominal tenderness with slight meteorismus, the pulse 87, thirst not so great, and countenance more composed and placid. The skin had become dry and the pulse accelerated during the night, when two doses of the *veratrum* reduced the fever. The quinine and the bisulphite of soda, with an occasional dose of morphine, were kept up for the two or three following days, and the patient made a good and permanent recovery.

A Recto-Vaginal Fistula Cured without an Operation.

In the *Transactions of the Wisconsin State Medical Society*, 1871, Dr. G. F. MILLER, of Grand Rapids, relates the following case:—

May 16th, was summoned in haste to see the only child (a girl) of J. F. L., æt. seven months. Her pinched features and sallow complexion gave me anything but a favorable impression of the disease, which the parents were pleased to call canker, and which had existed for months previous in the form of apthæ, and seemed to have traveled the whole length of the primæviæ, evidently involving the structure in its pathway, as had been frequently evinced by muco-purulent evacuations. At this time there had been an evacuation from the rectum into the vaginal passage, which excited no little solicitation and anxiety. It was not until I saw the passage of the evacuations myself, that I was without doubt concerning this new and unnatural passage into the vagina. Upon examination, however, it was found that there had been actual ulceration through both intestinal and vaginal walls. The opening thus formed was quite small, there being *tormina* and *tenesmus* during each evacuation. Urine scanty and highly colored, together with general prostration of the whole system. There are perhaps few questions in surgery which afford a better test of judgment, experience and decision, than those concerning such cases as I now report. I confess, I was much at a loss what course of treatment to adopt in this case. Positive directions were given, however, for a wet nurse to be had, the mother's milk being almost entirely destitute of nutriment, she having suffered for a long time previous with stomatis, and her general health being quite precarious. The next and by no means the least indication was yet to be secured, viz.: to close and keep closed, the unnatural passage into the vagina.

One of the most important elements in the treatment of such cases is to be found in the great principle of rest, as carried out both in medicine and by an apparatus which will perfectly retain the parts in position and at the same time not interfere with the natural exit of urine. To secure the former an enema was ordered to be given once in three hours per anum, consisting of one-half ounce of the following preparation:—

℞.	Opii pulv.,	gr.x.
	Gum myrrh,	ʒj.
	Ext. glycerhiz,	ʒss.
	Venice turpentine,	ʒjss.
	Ol. anisi,	
	Persulph. iron,	aa ʒj.
	Aquæ fontanæ,	Oj.

Mix and boil for one hour.

The vagina was then packed with surgeon's lint, saturated with the following solution:—

℞.	Ol. olivæ,	
	Glycerine,	aa ʒss.
	Carbolic acid,	gtt.x. M.

The lint thus saturated was applied and kept in place by compress, until after passage of urine, when it was removed and new dressings applied.

17th. Evacuations less frequent; tormina and tenesmus subsided; packing was removed but once during the night; child very languid; no evacuations through the recent passage; continuation of above treatment was ordered.

19th. Symptoms improved; evacuations from the bowels less frequent; urine very scanty; restlessness and some fever. Treatment continued, together with the following:—

R. Gelseminum,
Tinct. aconite root, aa gtt.v.
Spts. nitre, ʒj.
Syrupus,
Aqua fontana, aa ʒiij. M.
Dose every three hours.

20th. All the symptoms much improved. This same treatment was continued with gradual improvement of the symptoms until the 25th, when the enema was discontinued and one drachm of castor oil given, which operated quite naturally the same day. On the 26th inst. the packing and all medicine were discontinued. The child continued to improve from the first.

The Temperature in Splenic and Cardiac Disease.

A case was reported lately to the Chemical Society of London, by Dr. ANDREW, showing wide daily range of temperature in connection with vegetations on the mitral valves (rheumatic disease) and infraction of the spleen. William Henry C., aged 16, was admitted into Victoria Park Hospital, under the care of Dr. Andrew, on October 27th, and died on December 6th, 1871. He had had a severe attack of rheumatic fever two years previously, and had never been well since; he had a slighter attack three weeks before admission. On admission he had still pains in the hips; was very pale and thin; pulse 120; tongue coated. His appetite was bad, and he was thirsty. The bowels were confined. He had a slight hacking cough. The dyspnœa was generally worse at night. The urine was of specific gravity 1020, containing a trace of albumen, which was never again found. The lungs were normal. The heart was greatly hypertrophied. A blowing systolic murmur, loudest at the apex and towards the axilla, was also heard posteriorly. The liver was slightly, the spleen greatly, enlarged. For the first ten days after admission, the evening temperature ranged from 103 to 105 deg., the morning temperature from 98 to 101 deg. He had a slight attack of tonsillitis, and for two days the temperature remained at 103–104 deg. After this the daily variation returned and gradually diminished, the minimum rising and the maximum falling; on the whole, however, the mean temperature was somewhat increased. On December 1st the temperature began to fall, rising again for a few hours on the 4th. On the 6th, an hour or two before death, it was only 94. At the *post-mortem* examination nothing was found except the disease of the heart and of the spleen, with one or two small fibrinous wedges in the kidneys also. The spleen grew larger for some time after admission, the gradual diminution in the daily variation of temperature coinciding with the subsequent gradual decrease in its size. The microscopical examination of the blood showed no increase of white corpuscles, but a pale, shriveled state of the red discs. The prominent features of the case were the dyspnœa, without any physical evidence of pulmonary or pleural change, the extreme anæmia and muscular weakness, the constant drowsiness, and the absence of rigors and of any form of delirium. He seemed to die at last from cold.

Fracture of the Patella.

The following case is reported by Drs. F. R. and C. E. SMITH, in the *Northwestern Medical Journal*:—

F. S., German, æt. 45, contractor and mason, while descending a step-ladder into an excavation for a cellar, fell about four feet, striking his left knee. On attempting to rise he found the knee very painful, and was forced to desist.

On visiting him soon after we found that the patella had been broken into five pieces. There was no mark of bruising, nor was the skin broken; but at one point the cuticle was abraded as if he had fallen on a *small* pebble or chipping of stone (the bottom of the cellar was solid rock); and from this point the fracture radiated.

We placed the limb at rest, having applied a bandage from the ankle to the hip merely tight enough to control the muscles, and as the part was swelling rapidly, ordered a cold, evaporating lotion.

After several days, when the heat and swelling had abated, we placed the limb on a single inclined plane, and applied adhesive straps as recommended by Dr. Hamilton.

In about twelve hours the part became so swollen and painful that we were obliged to remove the dressing; we reapplied the bandage, and ordered the lotion again to be used. After forty-eight hours we again applied the adhesive straps as before, very carefully, but were again obliged to remove them. After two days, the heat, pain and swelling having subsided, we applied strips of adhesive plaster *obliquely* around the joint both above and below the patella, and bound the limb firmly, but not tightly, to a well padded back splint. This dressing also we were obliged to remove on account of the inflammation and discomfort it caused. We now allowed the limb to remain for a week without any dressing to keep the fragments in apposition, beyond the roller as first applied. We then successively tried Dorsey's dressing, Gerdy's, and several others, with all the modifications we could think of, but with no better effect.

Finding that all attempts to bring the fragments into close apposition caused pain and swelling, we concluded to put the limb, bandaged firmly, but not tightly, with figure of eight turns about the knee, into a well padded, carved back splint, jointed at the knee; to this we bound the limb from the foot to the upper part of the thigh with a roller.

We found this well borne, except that our patient complained of the *entirely* straight

position of the leg; by means of the screw at the joint we gave the splint a slight angle, making a double incline on a very small scale, thereby greatly adding to his comfort.

We attempted several times during the course of treatment to substitute some more secure means for retaining the fragments in apposition, but with invariably the same result; they could not be tolerated.

At the end of six weeks our patient was allowed to be about, and soon to go out, wearing, however, a bandage that would support the patella, and also restrain motion at the knee.

On measuring the patella at the end of six weeks we were both pleased and surprised to find a little less than one-fourth of an inch of lengthening.

Reviews and Book Notices.

NOTES ON BOOKS.

——Mr. E. Steiger, of New York, has published a catalogue of the most important German publications in the department of medical science during the last fifteen years. It is a neat pamphlet of 82 pages, the books classified under headings similar to those of Virchow's *Jahrshericht der Medicin*, nearly the same as our Half Yearly Compendium of Medical Science. It is a most convenient and useful reference catalogue. The only criticism we have to make is that the year in which the various works appeared is not given. To purchasers anxious to obtain the latest authorities, this is a serious drawback. The title is *Steiger's Medicinische Bibliothek, herausgegeben von E. Steiger, New York.*

——Another medical periodical has been commenced in Baltimore, entitled *The Physician and Surgeon.* It is published monthly, under the auspices of the College of Physicians and Surgeons of that city.

——Miss Sophia Jex-Blake has written a book called *Medical Women.* It consists of a historical and argumentative essay on the subject; and of a lecture, delivered before a London audience, detailing the progress and present state of the particular movement in Edinburgh, which Miss Jex-Blake has herself instigated and directed. The first of the two papers gives a succinct account of the more remarkable women practitioners and teachers of medicine of former times, and refers briefly to the modern instances, and to the increasing consideration with which the demand for the medical education of women is being treated, more particularly abroad.

BOOK NOTICES.

Thermic Fever, or Sunstroke. By H. C. Wood, Jr., M. D., etc. Boylston Prize Essay. *Pro Bono Publico.* Philadelphia: J. B. Lippincott & Co. 12mo, 1 vol., cloth, pp. 128.

As the title-page informs us, this work is, for the most part, the Boylston Prize Essay for the present year. Its appearance may be considered to have been peculiarly opportune, as sunstroke has occupied public attention in a very prominent manner this last summer. Nearly ten years ago Dr. Wood studied several cases with particular attention, and published the results of his observation. He noted the peculiar rigidity of the heart after death, and the prominent febrile symptoms, which latter led him to give it the name of "thermic fever." Whether anything is gained by this new name we doubt, as the common and familiar word *sunstroke, insolatio, coup de soleil*, commits one to no theory, and is abundantly indicative.

The present volume (which, we regret to see, is without either table of contents or index) is divided into four parts, Clinical History, Nature, Treatment, and Sequelæ. In the second of these the author details his own experiments and those of others, showing, first, that rigor mortis is owing to the coagulation of a muscular plasma; and, secondly, that in certain varieties of sunstroke death is owing to an ante-mortem coagulation of the cardiac myosin. Death also results from paralysis of the respiratory nerves from overheating the brain. The blood is black and semi-fluid, owing to the respiration being unequal to the increased oxidyzing power of high temperatures.

In the part on Clinical History, Dr. Wood justly discriminates between heat exhaustion and sunstroke proper, but intimates, what seems strange to us, that the former is comparatively rare. In speaking of causation he does not allude to the comparative exemption of sailors, when at sea, from the effects of heat. Mariners of long experience in the tropics have informed us that sunstroke on shipboard, out at sea, is abso-

lutely unknown; and we remember to have seen the same remark made by an East Indian surgeon. Of predisposing causes he mentions several, but omits two which we believe very important—a previous attack, and race. The black race has *almost* an exemption from this danger; and one "stroke" leaves a predisposition to another for an indefinite period (as, later in the book, Dr. WOOD recognizes).

In the treatment, Dr. WOOD is not sufficiently full and explicit. He opposes bleeding, but says nothing of Dr. B. W. RICHARDSON'S advocacy of it in certain (rare) cases, on what seems to us excellent grounds. Cold affusions and morphia are what he recommends; but, singularly enough, expresses no opinion whatever on the propriety of using alcoholic stimulants. The treatment of the sequelæ he dismisses in half a page of generalities, which is very far from doing the subject justice.

Although we have allowed ourselves to point out these lacunæ in the book, its very excellence in most respects is what has brought them prominently to our notice. We commend it as the most complete and satisfactory essay we have ever read on the subject, and the author deserves the highest praise for his skillful original experiments, and the sagacity he displays in their interpretation.

Cancer: its Varieties; their Histology and Diagnosis. By HENRY ARNOTT, F. R. C. S., etc. Illustrated with lithographic and wood engravings, from drawings by the author from nature. Philadelphia: Lindsay & Blakiston. 1872. 1 vol, 8vo, Cloth. pp. 86.

The author's position for some years as Surgical Pathologist at the Middlesex Hospital, London, gave him unusual facilities for studying malignant growths. The fruits of his researches were partly published in the *Medical Times and Gazette* (London), but he has done well to preserve them in book form, for they add materially to our knowledge of the histology of these much feared enemies of our kind.

He is a firm believer in the primarily local nature of cancer, as opposed to the nature of a specific blood disease, like syphilis, and is bold enough to hope that successful treatment will follow in time an accurate diagnosis of such growths. Hence he illustrates with great pains and clearness the varieties of cells and inter-cellular structure which characterize the varieties of cancer he recognizes. The "cancer cell," as a distinct and pathognomonic growth, he does not, however, recognize. Psammoma he does not consider malignant at all.

The directions for the examination of cancer under the microscope, given in the second chapter, are extremely useful, as much discrepancy among observers has arisen from their diverse methods of investigation. The last chapter contains a practical summary, giving the therapeutical and prognostic value of an accurate diagnosis, and the relative value in diagnosis of family history, age, cachexia, pain, gland involvement, etc. It will be found of very considerable value to the surgeon.

The Magnetic and Mineral Springs of Michigan, to which is prefixed an Essay on the Climate of Michigan. By STILES KENNEDY, M. D. Wilmington, Del.: James & Webb, 1872. 1 vol., cloth, 8vo, illustrated, pp. 127. Price $2.

A few years ago considerable attention was attracted to the alleged magnetic properties possessed by the waters of some artesian wells in Michigan, especially when it was further added that such waters possess therapeutic properties in a high degree. Dr. KENNEDY has given more study, probably, than any other physician, to both the inquiries here involved. The readers of this journal will recall that some of his results appeared in our pages (March, 1870, etc.). In the work whose title is given above he enters more thoroughly into the theme.

The subject of the magnetic qualities of the water itself he does not conclusively decide, though inclining to the affirmative view. Their therapeutic value he esteems much higher than we can, after reading the evidence adduced in its favor. After giving proper credit to change of air, a regulated diet, a healthy climate, judicious bathing, electricity, and drugs, we cannot see that any of the cases he cites owe anything to Michigan mineral water at all. A feeble tonic effect from the iron many of them contain is at most all they can claim at present.

As a guide-book to the prominent health resorts of the State, and as an impartial and carefully compiled Essay on the Springs, the book deserves commendation.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPT. 7, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE QUESTION OF INTOXICANTS.

Some weeks ago we laid before our readers the views of Dr. ANSTIE and others on this important question. While anxious to avoid a pertinacious drumming on a question already so old and weather beaten, we believe that the views of some other recent authorities will not be considered out of place by our readers.

Quite lately Dr. G. HURT, of St. Louis, has reviewed the question of alcohol as a therapeutic means, in the *Medical and Surgical Journal* of that city. His conclusion, after a pretty thorough collation of authors, is this:—

"Though the opinions of scientific men may differ with regard to the physiological effects of alcohol, and its therapeutic indications in some phases of disease, yet on some points there appears to be pretty general unanimity.

"It is admitted by all, that by interrupting the oxidation of the tissues, or by some other more mysterious process, it checks waste, and is therefore indicated in cases where the moulting of the tissues is supposed to be in excess of their nutrition, though I doubt not other articles in the materia medica might be found to answer these indications quite as well, if not better.

"It is also an admitted anæsthetic, and is indicated in many forms of nervous erethism; but in the sulphuric and nitric ethers, in chloral hydrate, the bromides, and in some of the preparations of ammonia, we have remedies equally potent, and on moral considerations greatly to be preferred. For when we consider the dangers to which every resort to alcoholic liquors as a medicine exposes the patient, to a habit for their use in health, it must be conceded that other remedies which will meet the indication ought to be preferred, and any resort to it which is not absolutely necessary subjects the prescriber to a fearful responsibility, both as physician and citizen."

Since Dr. HURT wrote his article, the experiments of Dr. SUBBOTIN have been made public. They are described as follows by Dr. H. P. BOWDITCH, in the Boston *Medical and Surgical Journal*:—

"They were performed on rabbits enclosed in an apparatus by means of which the exhalations of the skin and lungs could be examined for alcohol. The urine was also collected and examined for the same substance.

"The experiments showed that in the first five hours after the introduction of 3.45 grammes of alcohol into the stomach of a rabbit, about 2 per cent. was eliminated by the kidneys, and 5 per cent. by the lungs and skin.

"Experiments extending over a greater length of time led to the conclusion that, usually, during twenty-four hours at least 16 per cent. of the injected alcohol leaves the body in an unchanged condition (or perhaps as aldehyde), and that besides this elimination by lungs, skin and kidney, a portion of the alcohol is oxidized in the organism. Although by this oxidation force must be set free in the organism, the author does not consider that alcohol is on that account to be regarded as a nutriment, for the functions of the animal body depend for their performance, according to Dr. S., upon the transformation of living material, *i. e.*, of the constituent parts of the body, and not upon the decomposition of matter foreign to the body.

"In a note appended to Dr. SUBBOTIN'S essay, Prof. VOIT expresses himself as follows: 'I do not agree entirely with Dr. SUBBOTIN in his views on the importance of alcohol as a nutriment. I define a nutri-

ment as a substance which is capable of furnishing to the body any of its necessary constituents or of preventing the removal of such constituents from the body. To the first class belong such substances as albumen (since it can be deposited as such in the body), or fat, or water, or the mineral constituents of the body; to the second class belong such substances as starch, which hinders the loss of fat from the body. If a nutriment is defined as a substance which by decomposition furnishes living force to the body, the definition would not be exhaustive, for it would exclude water and the mineral constituents of the body. Alcohol must, therefore, to a certain extent, be regarded as a nutriment, since, under its influence, fewer substances are decomposed in the body. It plays in this respect a similar (though quantitatively very different) part to that of starch, which also protects fat from decomposition and, when taken in excess, causes deposition of fat in the organs, or fatty degeneration. If a part of the alcohol is decomposed in the body into lower forms of chemical combination it *must* give rise to living force, which either benefits the body in the form of heat, or may perhaps be used for the performance of mechanical work; the same is true of acetic acid, which is also not to be considered as an ultimate excretory product, and from which, therefore, in decomposition, potential force passes into living force.

"'It is another question, however, when we ask what importance alcohol has for us as a nutriment, and whether we take it in order to save fat from decomposition and furnish us with living force, in other words, to introduce a nutriment into the body. Since alcohol, when taken in considerable amount, causes disturbances in the processes of the animal economy, we cannot introduce it in quantities sufficient for nourishment, as we do other nutriments, and in the amount which we can take without injury its importance as a nutriment is too small to be considered. In this point, then, I agree entirely with Dr. SUBBOTIN; we use alcohol not on account of its importance as a nutriment, but on account of its effects as a stimulant or relish.'"

The treatment of inebriates is, we are pleased to observe, occupying considerable attention in Great Britain.

The Select Committee appointed to inquire into the best plan for the control and management of habitual drunkards have considered the matters referred to them, and have made a report. The Chairman personally undertook during the recess a special voyage to the United States, for the purpose of inquiring practically into the conduct of inebriate asylums here, and of acquainting himself with their beneficial effects. He has volunteered his evidence to the Committee, giving the result of his examination and experience.

From his evidence it appears that he visited eight institutions of this character in the United States, leaving only one unvisited at San Francisco; he also visited one in Canada. All of these are regulated by charter or by some Act of incorporation, and are managed by committees. They comprise all that exist as wholly public or as partly private inebriate asylums on the American Continent, and all except two received contributions and support from the State. Nevertheless, they originated either with societies or individuals actuated by philanthropic motives, and are partly maintained by them.

NOTES AND COMMENTS.

How to Disinfect a Room.

Dr. CAMERON remarked at a late meeting of the College of Physicians of Dublin that the complete disinfection of a room tainted with the poison of contagious disease can only be accomplished by the most thorough cleansing. The paper should be removed from the walls, and the latter scraped. The ceiling should be washed and whitewashed, the woodwork and floors should be scoured; all these detergent processes remove, probably without utterly destroying them, the contagious particles. The old-fashioned plan of simply whitewashing the walls and ceiling of a room, and washing the woodwork, has much to commend it, and it is infinitely more efficacious than gaseous disinfection without liquid applications. If the whitewash does not kill the bacteria, it certainly imprisons them securely. The disinfection of the air of the room is best ac-

complished by a solution of chloride of lime, carbolic acid, chromic acid, chloralum, etc., applied in the form of spray; but this process is not likely to be generally adopted. A little chlorine may be generated in the room, and if it do no more than remove a bad odor, it will prove useful. As people cannot comfortably breathe in a room which has just been disinfected by sulphurous acid or chlorine, they are obliged to open doors and windows, in order to admit the fresh air. In this way the use of disinfectants is to be commended, because it obliges people to ventilate their apartments. If solutions of disinfectants be applied to the walls and woodwork, they should be strong ones, say half a pound of chloride of lime to an imperial gallon of water. With respect to clothing and furniture, unless they can be treated with strong disinfecting solutions, or exposed to a temperature of 320° Fahrenheit for eight hours, it were better to destroy them by fire.

The Management of the Placenta.

The venerable Dr. FLEETWOOD CHURCHILL recently laid before the Dublin Obstetrical Society the statistics of his thirty-nine years' private obstetrical practice. We quote a part of it which refers to the detachment of the placenta.

"Of the interval which elapsed from the birth of the child until the extrusion of the placenta, *i. e.*, the third stage of labor, I have a record of 2387 cases. I find that in 1965 cases it was 5 minutes; in 278 it was 10 minutes; in 61 it was 15; in 25 it was 20; in 27 it was 30 minutes; and in 8 cases it was an hour. There is a note attached to most of these latter cases, stating that I did not arrive till some time after the birth of the child.

I have found only three cases of *post-partum* hemorrhage, with one death. There were ten additional cases in which extraction was necessary for different reasons, such as flooding, irregular contraction, and morbid adhesion. I may, perhaps, be allowed to remark that many of the cases in which the longer intervals elapsed occurred in the earlier years of my practice, before I had realized the safety and value of pressure so applied as to squeeze out the after-birth from the uterus into the vagina.

If firm grasping pressure be applied to the uterus immediately after the child is born, and continued for a few minutes steadily, it will be found to diminish in size suddenly, and the placenta will be found in the vagina, from which it is easily removed. The squeezing force should never be excessive, lest we inflict injury; nor is it necessary. More than twenty years' experience has satisfied me not only of its efficiency, but of its safety. I have never known hemorrhage follow in cases thus treated. In some few cases it will fail, of course, and then we must have patience until uterine action sets in, or other circumstances show the necessity of further interference.

Natation.

Our contributor who recently spoke so well, in these pages, in favor of the art of swimming, will be pleased to learn that the members of an English bathing club recently took breakfast in a somewhat singular manner. A floating table, decorated with flowers, was anchored some distance from the shore, and upon it were placed hot coffee, eggs, etc. About twenty members of the club then swam out to the table and partook of the breakfast, one of the conditions being that none should touch the table itself.

Epilepsy Treated by Bromide of Potassium.

In a recent number of the *Gazette des Hopitaux*, Dr. DU SAULLE has published the results of the administration of bromide of potassium in two hundred and seven cases of epilepsy. Headache, gastric disturbance, disturbance of sensation, and other troublesome symptoms, have been described as following the use of the remedy; but these he has not found to occur when the drug has been pure. When the quantity taken daily reaches 4 *grammes*, the reflex sensibility of the fauces, epiglottis, and root of the tongue, and the sensibility of the generative organs, are diminished. Acne then also appears; which is not, however, as has been represented, of critical importance. Dr. LEGRAND DU SAULLE commences with a *gramme* and a half or two *grammes* daily, and increases the dose gradually to 6 or 9 *grammes* a day.

Of 207 epileptic patients treated with bromide of potassium, all symptoms of epilepsy ceased in 17, who were under observation during three or four years; 28 remained free from one to two years; in 33 there was marked improvement: in 19 the intervals between the attacks were increased, and

these were less severe; in 110 there was no result. Dr. LEGRAND considers that it is not safe to entirely omit the use of the bromide, even when there has been no epileptic attack for a year. The patients, however, must be watched; for, under the prolonged use of the bromide, mental disturbance, stupor, confusion of ideas, impotence, and acne are apt to set in. The last named affection has sometimes disappeared under the use of arsenic simultaneously with the bromide of potassium.

Sunstroke in London.

In spite of what our English cousins call the torrid heat of the past summer in Great Britain, only one fatal case of sunstroke was reported in London. One of the boys belonging to the "Goliah" training-ship was struck down just after being reviewed by the Prince of Wales. He was brought to the hospital, and died in a few hours, in spite of treatment; his temperature before death exceeded 109 deg. The necropsy showed nothing but very fluid blood, and a somewhat congested brain; the lungs and other organs were healthy. The absence of prodromata is remarkable in these cases. A strong-looking laborer, of middle age, was admitted also into St. George's Hospital. He had been at work all the morning, and became suddenly unconscious just as he was going off to dinner; he declared that he had not been at all inconvenienced by the heat, had taken nothing to drink, and been perfectly well till the moment of the attack.

The Mortality in Paris During the Siege.

Dr. SUEUR estimates that the total mortality during the twenty-eight weeks of 1870–71 was 77,231, an excess of 52,303, this being apparently the toll which death demanded, and the price which the Parisians paid for the glory of resistance to BISMARCK and VON MOLTKE. The mortality fell unevenly on persons of various ages. Between fifteen and twenty-five it was multiplied sixfold. The general mortality was tripled. The mortality was least among men from forty to sixty; they took no part in active service, and had comparatively greater facilities for resisting cold and privation. The diseases which contributed chiefly to the immense mortality were six, small-pox, bronchitis, pneumonia, typhoid fever, diarrhœa, and dysentery.

A Centenarian.

The death of a centenarian, Mrs. C. MURRINE, is announced in Newark, N. J. Deceased was a native of Ireland, and came to this country twenty-five years ago. She reached the advanced age of 105 years and 10 months.

NEWS AND MISCELLANY.

Patents Issued.

List of Medical and Surgical Patents issued from the United States Patent Office to United States Inventors, for the week ending August 6, 1872, and each bearing that date. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C.:—

Hair Restoring and Coloring Compound—G. Smith, Ayer, Mass.

Medical Compound or Salve—E. Wilson, Buchanan, Mich.

Machine for Polishing Dental Plates—E. A. Mayor, Owego, N. Y.

The International Ophthalmological Congress.

This Congress convened in London, August 1, and had a well attended and interesting meeting. The business was conducted, as far as possible, in the French language. M. Donders, of Utrecht, was elected President. Among American Physicians who were present we note the names of Drs. Thomson and Dyer, of Philadelphia; Dr. H. W. Williams, of Boston; Dr. Green, of St. Louis; Dr. Agnew, of New York; Dr. Rider, of Rochester; Dr. Roosa, of New York, and Dr. J. Jeffries, of Boston.

Sudden Death of an Army Surgeon.

Intelligence has been received of the decease of Dr. Joseph E. Semple, surgeon in the United States Army, near Meriden, Mississippi, on Tuesday, August 27th. Dr. Semple was a native of Philadelphia, and educated to the medical profession. He graduated at Jefferson Medical College in March, 1853, was for five years surgeon in the United States Navy, and in July, 1861, was appointed assistant surgeon in the United States Army, and continued in the service until the time of his death. Dr. Semple was in the prime of life, and in fine health, and only recently visited his relatives in our city. He was on his way to New Orleans to receive orders from the commanding officer, and died suddenly of apoplexy, in the cars, near Meriden, Mississippi. He was highly esteemed by his brother officers. His loss is mourned by a large circle of friends and relatives in Philadelphia.

ADDITIONAL deaths are reported this week from chloroform.

Kings County, N. Y., Institutions.

The annual report of the Kings County Nursery, submitted to the Board of Supervisors of Kings County, shows the total number of inmates at present 1014, of whom 581 were admitted since July 31, 1871. All but 112 of the total number are children.

There have been 4193 patients received at the Kings County Hospital during the year just closed, and there were 346 in the institution at the close of the previous year. There were during the year 663 deaths, and 2890 discharged; the remainder are still in the wards.

The Almshouse report for the past year shows 1768 persons admitted, which, with 664 remaining over from the previous year, gives a total of 2433. There have been but nine deaths in that institution during the year; 1401 were discharged and 459 transferred, leaving 563 remaining.

Philadelphia Protestant Episcopal City Mission Dispensary.

A Medical Dispensary for the purpose of furnishing Medicines and Medical advice, free of charge, to all persons who may be in need, will be opened on Monday, the 16th inst., at No. 1017 Morris street, in the southern section of our city. The Dispensary is to be open daily (Sundays excepted) between the hours of 11 and 1 o'clock.

The following members of the Medical Profession have kindly volunteered their services: Wm. H. Hutt, M. D., Men; Roland G. Curtin, M. D., Harry C. Mecuen, M.D., Women; John Sterling, M. D., Wm. F. Woolsey, M. D., Surgeons; H. F. Baxter, M. D., Skin; Chas. L. Hart, M. D., Geo. M. Reed, M. D. Children.

Personal.

Dr. O. Liebreich, to whom medicine is indebted for the discovery of the action of chloral, has been appointed ordinary Professor of Materia Medica in the University of Berlin.

Dr. Brown-Séquard has resigned the Chair of Comparative and Experimental Pathology in connection with the Faculty of Medicine in Paris, which he has occupied several years. M. Vulpian has applied for the Chair.

The Hotel Dieu, Paris.

The new Hotel Dieu is said to be wholly unfit for hospital purposes. So two physicians of Paris, Drs. Tiulié and Marmottan, suggest that the old portion of the hospital, on the left bank of the river, should be retained as a hospital, for 200 patients; and that the new portion should be sold to a company—French or foreign—for the purpose of forming docks like those which exist on the borders of the Thames in London. They further point out, that of twenty-two *octroi* barracks around Paris, four are unoccupied, and may be readily put into repair as hospitals capable each of containing 100 beds. To make up the number of 800 beds which are required, they propose the erection of a new hospital to receive 200 patients.

NOTES AND QUERIES.

Extirpation of Ovaries.

Messrs. Editors:—Are there *any* circumstances under which the ovaria of a young lady should be extirpated, those organs being perfectly sound, both organically and functionally?

The operation was performed *here* very recently, with no other excuse than vicarious menstruation through the rectum. Answer, if you please, in the REPORTER, as soon as convenient. J. H. N.

REPLY.—The operation in such a case is indefensible, and should only be resorted to in case of serious organic disease.

Artificial Limbs.

Messrs. Editors:—Please inform me, through the REPORTER, which you consider the best patent for artificial limbs (legs), and give address of manufacturer. An early answer would oblige. J. B. S.

REPLY.—The leading manufacturers have been accustomed to advertise in the REPORTER the last few years. We believe there is no essential difference between the products of the three or four leading firms in this country.

Poisoning by Aconite.

Messrs. Editors:—Will you please to give me your opinion, through the REPORTER, as to the possibility of saving a patient who, through mistake, had taken a half ounce of the *Tinctura Aconiti Radicis* one half-hour before medical aid could be procured; also, the best treatment to be adopted under such circumstances?

Respectfully, etc., S. B. S.

Ohio, August 12, 1872.

REPLY.—We should certainly not despair in such a case. Death in aconite poisoning results from local inflammation and vascular engorgement. The stomach should therefore be emptied at once, by a prompt emetic, and diffusible stimuli administered afterwards. Animal charcoal, freely exhibited, will lessen the inflammatory action, and strychnia has been found of service in after treatment. Death in such an instance, probably, would not occur for two or three hours if nothing was done, and this itself is favorable.

Dr. John H. P., of Pa.—The case you describe is probably one of vaginitis with urethritis. Local sedative lotions, and vaginal injections, with some alkaline preparations internally, would be appropriate.

Dr. T. J. B. R., of Pa.—The Philadelphia College of Pharmacy is located on Tenth street, above Arch. Apply to William Proctor, 900 Lombard St.

MARRIAGES.

DEVENY—MCGILL.—In Syracuse, N. Y., July 1st, by Rev. Joseph M. Clarke, D. D., S. Charles De Veny, M. D., of Williamstown, Pa., and Miss Minnie C., only daughter of the late W. C. McGill, of Simcoe, Ont.

THE

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Original Department.

Lecture.

ON IDIOSYNCRASIES.

Translated from the *Lecons de Pathologie Experimentale* of M. Claude Bernard, for the Medical and Surgical Reporter.

Gentlemen:—In my preceding lectures I have endeavored to exhibit the intimate relations existing between Physiology and Pathology, and to prove, as far as it was possible for me to do, that the phenomena which are manifested in the living body, either in a healthy or in a diseased condition, should in all cases receive a rational interpretation. I have told you that they may be directly referred to the action of biological laws which govern the vital functions, not only in the normal state, but also in all the perturbations which these functions may experience.

Daily experience, nevertheless, teaches us that morbid causes, whatever may be, otherwise, their general effects, are far from acting with equal intensity on the various individuals exposed to their influence. Cold, hunger, thirst, fatigue and moral distress are the most ordinary causes of disease. Are they not, to a certain degree, the lot of human nature? How then does it happen that among those exposed to their daily action, some sink so rapidly, whilst others resist with great energy? And when an epidemic rages at a given spot, how is it that the prevailing disease attacks only certain persons, sparing other individuals who are in constant communication with the sick? To this apparently mysterious power, which thus modifies in each particular case the influence of external agents, we give the name of *Idiosyncrasy*.

We may, I think, admit as a principle that predispositions, not only morbid, but likewise physiological, exist in man as well as in animals. In the normal state, each individual, by virtue of his peculiar organization, is more especially exposed than any other to certain peculiar accidents. The various animals subjected to our experiments are far from exhibiting the same phenomena under the influence of the same agents. You already know that as we rise or descend in the animal scale, we meet with animals more or less sensible to the action of certain poisons; of those, for example, which act more particularly on the nervous system. Thus it will be seen that even in the limits of health, living beings may present striking differences. As we have already demonstrated, these different properties do not depend solely on the general organization of the animal, but frequently also on the conditions in which it has been placed. In this way a rabbit may be reduced to the physiological level of a batrachian; and by reversing the experiment, we arrive at an opposite result. Now these important modifications almost always bear a close relation to the state of the nervous system.

It is not alone among animals belonging to different species that we remark great inequalities in this respect. It frequently happens that individuals belonging to the *same species* resemble each other so little that it is impossible to subject them to the same experiments. The nervous sensibility of a hunting dog is so highly developed that the slightest operation gives rise in it

to fever which may be followed by a fatal termination. These animals are, therefore, unsuitable for experiments on the gastric juice, the pancreatic secretion, or other similar phenomena; every operation performed on the interior of the abdominal cavity may excite peritonitis in these eminently sensitive animals. How vast the difference between them and the dogs which may be considered as belonging to an inferior breed. The results of the experiments are totally various. During the operation the animal scarcely makes a movement, apparently does not suffer at all; the appetite is unchanged, the secretions remain natural. In short, the various functions of the economy follow their accustomed course despite the pain inflicted.

In the horse, these differences are, if possible, still more pronounced. The characteristics of certain breeds are, in common parlance, attributed to *blood*; it would be more exact to attribute them to the *nerves*; in fact, it is a highly irritable, sensitive, nervous organization which distinguishes a blooded beast from one of the half savage little horses which inhabit mountainous regions. The results of the same experiment would be diametrically opposite in those animals, and no comparison could be established between them. Therefore whenever an experiment requires great powers of resistance in the subject, the latter must be selected from the inferior races. If nervous irritability and exquisite sensibility are, on the contrary, the necessary qualities, we must have recourse to the more highly bred animal. Experiments on recurrent sensibility which succeed almost always in the hunting dog, fail almost constantly when performed on the shepherd dog. In this respect cold-blooded animals are found in the lowest degree of the scale. It will thus be conceived that a state which, in certain individuals, constitutes an actual disease, may, in others, harmonize with the natural conditions of life.

We may be allowed to believe that in man, the differences which separate individuals, ought to be still greater than those between the various species of animals; and if we may be permitted to allude to questions which, at this moment, are occupying public attention, is it not true that hypnotism is a peculiar state which can be developed only in a small number of impressionable and nervous individuals? Are not the phenomena of somnambulism to be classed in the same category? It is, therefore, evident that idiosyncrasies are merely peculiar sensibilities which exist in a normal condition in various individuals.

Hitherto we have considered merely physiological, and so to speak, innate predispositions; however, as physicians, the accidental, morbid and transitory idiosyncrasies are those which most interest us. To ascertain the conditions from which they may arise is, for the physiologist, a study of the last degree of importance.

If we compare an animal in a state of abstinence with another in that of active digestion, the most evident dissimilarities will be remarked in the results of all the experiments to which they may be subjected. A dose of strychnia which kills the latter immediately, will require a certain space of time to act on the former. The absorbent power has naturally been quoted to explain so striking a discrepancy; but do we not know that in the fasting state absorption is infinitely more active than during the process of digestion?

This explanation cannot, therefore, be sustained. The debilitation of the physical properties of the nervous system is in reality the only cause to which, in this case, we can appeal. Deprived of nutrition, the animal gradually descends in the scale, and at last acquires properties more or less removed from its original condition. Is that an actual disease? Undoubtedly not; it is the natural result of a well known physiological condition.

We are, therefore, authorized to deny absolutely the existence of a so-called *morbid physiology*, if by these words is understood a state of things completely independent of the ordinary laws of life. Expressions used in a limited sense should be banished from scientific language; they serve only to confuse one's ideas and to mislead observers. When we speak of medical chemistry, for example, we do not pretend to say that the chemical reactions which supervene in the vital phenomena are subjected to laws differing from those which exist outside of the living being. Morbid physiology has, undoubtedly, processes which may be peculiar to it, but its laws are perfectly identical with those which govern, in the healthy state, the functions of life.

Not inanition alone thus modifies the conditions of life; cold, and many other causes,

likewise act in the same way, and vary the results of our vivisections. At a low temperature, cold-blooded animals become less and less sensible to the action of certain poisons; a stronger dose of strychnia is required to kill a frog in winter than in summer. But chloroform, ether, and even the ordinary intoxication of alcohol, produce similar effects; and it is generally believed, in America, that intoxication is a preservative against the bite of the rattlesnake.

Such are the physiological modifications of the economy which lead us to the study of those which belong more especially to the pathological condition. It has for a long time been known that remedies do not act on the sick in the same manner as on the individual in high health. Now, the biological conditions which determine the disease are evidently the source of these irregularities. To give a well-known example, we observe that wine, brandy, and the various alcoholic preparations so liberally used by American physicians in the treatment of fevers, when administered in doses which in a healthy man would inevitably produce intoxication, appear to cause an entirely different effect on the patient. The fact may be explained in two modes: in the first place, the absorbent functions might be, during the disease, modified, or even suspended; in the second place, the nervous system might be powerfully depressed. We know, for instance, that in certain cases of typhoid fever, absorption remains benumbed for a considerable length of time. This is proved by administering to the patient small doses of prussiate of potassa, of which no traces can be found in the urine, nor in the other secretions. An analogous condition may be artificially produced; for when the secretions are over-excited, the surfaces lose a portion of their properties. The internal surface of the salivary glands, which absorb so rapidly strychnia or curare in a state of repose, become momentarily rebellious to the action of these poisons during the process of secretion. We have seen a dog die almost instantly after the injection of five cubic centimetres of an aqueous solution of strychnia into the duct of Wharton. On a repetition of the same experiment on an animal in which the salivary secretion was excited by galvanism, death supervened only after an interval of twelve minutes.

Chloroform furnishes us a pathological example of the same fact; so long as this abundant serous excretion is maintained, the intestinal parietes can absorb no remedy. It will be said that these modifications are determined by the disease; this is undoubtedly true, but a peculiar physiological process is developed under its influence, and the facts observed flow from it as a natural consequence.

The suppression of the absorbing power is manifested in conditions entirely different from those which we have just been studying; it has been observed in acute mania; the sole cause of it, in this case, appears to reside in the nervous system, for so soon as the crisis has passed, absorption recommences, as in the healthy state.

Curare has been recently used in the treatment of tetanus; of four cases, two were cured and two died. In the favorable cases, the ordinary effects, or, more correctly speaking, the physiological effects of the poison manifested themselves; nothing similar took place in those who died. They presented, perhaps, a special condition of the nervous system, which prevented the manifestation of the action of this substance. It may be supposed that had they been placed under treatment at a less advanced stage of the disease, the result might have been more happy. In connection with this we may cite the well-known effects of the sulphate of quinine, which, given in a large dose, depresses the pulse, and acts on other morbid phenomena only by modifying the nervous system, and producing a more or less intense degree of deafness, etc. This physiological effect is most intimately related to its therapeutic action, for if the dose be too rapidly diminished, the deafness disappears, and the original morbid phenomena regain their violence.

But if we find, in animals as in man, various predispositions which may modify the action of remedies, we likewise see some which expose them to entirely different diseases, under the influence of absolutely similar causes. Such is the section of the filaments of the sympathetic nerve. I lately intended to perform some experiments on animals which had been for a long time deprived of food. I therefore allowed dogs which had been used for operations on the sympathetic nerve to starve for several days; but on the occurrence of cold weather, the animals died most unexpectedly; the autopsy revealed in one a pneumonia, pleurisy in another, and enteritis in the two re-

maining. We ascertained that, though placed in identical external conditions, these animals had been attacked by entirely different diseases, corresponding to the regions in which the sympathetic nerve had been wounded. When a rabbit is submitted to absolute inanition, life is ordinarily prolonged from fifteen to twenty days; but when certain filaments of the great sympathetic have been previously divided, these animals, deprived of nourishment, perish in a few days, from acute inflammation of the viscera which are fed by the nervous branches which have been severed. When I began this series of experiments, now some time ago, I perceived that the section of even the larger branches of the great sympathetic seemed to produce no special pathological condition in these animals, so long as their general health remained intact. I have seen females conceive and bring forth their young in spite of the operation they had undergone; but so soon as the economy was profoundly debilitated by the want of nourishment, the viscera deprived of their nerves became the seat of acute inflammations. I had, therefore, succeeded in creating, artificially, peculiar idiosyncrasies in animals, and I could predict with absolute certainty that, the health being once undermined, a morbid condition would be developed at a certain point.

Pathological predispositions should, therefore, be considered as special physiological conditions, which, in the majority of cases, depend on the nervous system, and medicine would have made an immense step if it were possible to foresee, in a state of health, the various morbid predispositions, and thus to predict the approach of danger. A Russian army surgeon, who had invented a new sphygmograph, and had applied it to the study of various diseases, pretended to have ascertained, during an epidemic of cholera, a peculiar feebleness of the pulse, which manifested itself for several days before the invasion of the malady, in those about to be attacked by it. I am not aware if these observations have been corroborated by others, but it would certainly be of immense advantage to be able to point out beforehand, during an epidemic, which individuals are most liable to fall under its influence. It would then be very easy to prescribe preventive measures, and establish hygienic regulations.

To conclude, I think that I have a right to advance the proposition that idiosyncrasies are not mysterious powers residing in the bosom of our organs, nor functions entirely new, superadded, as it were, to those which already existed. In them are to be seen only the simple manifestations of the ordinary laws of physiology.

Communications.

A CASE OF INDUCTION OF PREMATURE LABOR.

By Dr. J. C. McMechan,
Of Cincinnati, Ohio.

Just one hundred and sixteen years ago there was a consultation of physicians held in London, to consider the propriety of inducing labor in certain cases. This learned body of distinguished men came to the conclusion that the operation was justifiable, and since then it has been yearly growing into favor.

In regard to the ease with which labor can be induced, Dr. Barnes says: "It is just as feasible to make an appointment at any distance from home to carry out at one sitting the induction of labor as it is to cut for stone." This remark was made ten years ago, and the experience of ten years, he says, justifies him in repeating the observation now.

Dr. Macauly, the first to perform the operation after the meeting in London, in 1756, used the oldest, and, perhaps, the most frequently used means of inducing labor, that of rupturing the membranes. Since then various other means have been tried and found successful, but few of them are certain and harmless.

Oxytoccics are not, in the present state of science, to be thought of. They are both unreliable and dangerous, and if used, the child is always born dead.

Mechanical means are decidedly best, and in the past hundred years many ways have been tried, such as the vaginal douche, the colpeurynter of Braün, the cervical bag, the carbonic acid douche, the separation of the membranes, the intra-uterine injection, the evacuation of the liquor amnii, galvanism, and the placing of a flexible bougie in the uterus.

According to late authors on this most deeply interesting topic, the placing of a flexible catheter in the womb is the best of all the

means for inducing labor. By introducing the bougie between the membranes and the wall of the womb, a partial separation takes place, and labor pains are excited at once. This is the most natural way, or rather it induces the most natural labor of any other means, and it is without danger to the mother and child, comparatively speaking.

If the membranes are ruptured, it takes time to deliver. If uterine injections are used, the risk of killing the mother at once stares you in the face, and all the other means are equally dangerous, or entirely inefficient. To illustrate with what ease premature labor can be induced by means of a bougie, I will proceed to relate my case:—

On August 2d, 1872, at 5 P. M., was asked to see Mrs. S. On visiting the patient, I found her suffering very severely from dyspnœa, and also vomiting. She was fairly gasping for breath, and her stomach would retain nothing whatever, not even water. Her lungs were œdematous, and for several years she had been suffering with phthisis. The patient was six months and a half advanced in pregnancy, and ten days before my seeing her the fœtus died in utero, since which event the dyspnœa and vomiting supervened; the feet became dropsical, the pulse rapid, and other evidences of septicæmia came on. The pulse at the time of my first visit was 130, and weak.

The patient, when at home, resided in St. Louis, but was taken sick while at Columbus, Ohio. One of the most distinguished physicians of that place saw the case, gave the patient prescriptions, and advised her to travel home as rapidly as possible. This she attempted, and had progressed as far as Cincinnati, when she found herself too weak to go on. During the ten days previous to my seeing the case, the patient had had two severe hemorrhages from the lungs. She told me the fœtus had died in utero in three previous pregnancies, and the same symptoms had supervened, dyspnœa, vomiting, etc.; that labor came on of itself, and as soon as the fœtus was delivered, relief came at once. The patient was 43 years of age, and the mother of 13 children. On examining the urine it was found to be albuminous.

The woman was anxious to have labor induced, and seemed inclined to think it was the only thing that would bring relief. Looking at the exhausted condition of the patient, the rapidity of the pulse, the fact of no food having been retained for nine or ten days, no sleep having been procured for several days, the poisoned condition of the blood, the age of the patient, etc., it seemed like a hopeless case, and the only means of giving relief, or a possibility of relief, was to induce labor, to remove the putrid fœtus from the womb, to take away the cause of the septicæmia. Returning at 8 P. M., I found the patient in the same condition, and proceeded at once to induce labor. There were no symptoms whatever of labor coming on at this time, nor had the patient experienced any pain in the pelvic region.

I introduced a gum elastic catheter into the womb about five inches, between the membranes and the wall of the uterus, doubling the remainder of it up in the vagina, and kept it in position by means of a tampon of sponge and cotton.

The patient could not lie recumbent long, owing to the dyspnœa, or else the tamponing would not have been necessary. Prescribing a stimulant, the patient was left for the night, the nurse being requested, if pains came on, to send a messenger for me.

At 5 A. M., on the 3d, the messenger came, and on my arriving at the house and making an examination, the os was found well dilated and the membranes protruding. Pains were in quick succession and strong. Everything seemed favorable for a rapid termination of the labor. Wishing to terminate labor as quickly as possible, I ruptured the membranes, and thereby retarded the event about two hours. The pains before the liquor ammii was discharged were very strong, but immediately subsided, and did not return for two hours, although ergot was administered.

At 8 A. M., just twelve hours after the bougie was introduced, the fœtus was expelled. The placenta was easily delivered, and the hemorrhage was very slight; but notwithstanding, the patient seemed to sink immediately. Her pulse could hardly be felt, the extremities grew cold, and death seemed imminent at any moment. By placing heated irons to the body, and using other means to bring up the circulation, the patient, in an hour, was able to swallow a stimulant in the form of carbonate of ammonia. No vomiting occurred after delivery, although it had been so constant before. The dyspnœa was also relieved, and stimulants were taken freely all day, in the form of wine, carbonate of ammonia, milk, and beef-tea. At 8 P. M. the patient was

quite comfortable, but later in the evening grew worse, and got no sleep during the night, although she had slept nearly all day.

On the 4th the case seemed more favorable; patient breathed quite naturally, took food freely, and rested well at night. Next day, condition the same; but on the 6th, at 5 A. M., the dyspnœa returned, extremities grew cold, pulse weak, but 140, and patient continued to grow worse all day. At nine P. M. patient died.

The fœtus was quite putrid when delivered, and was undoubtedly the cause of the septicæmia. Had labor been induced five or six days earlier, the patient's life would undoubtedly have been saved. At the time of induction, the patient was so much exhausted that the prospect of saving her life was very slight, but still the fact of the vomiting ceasing, and the patient living four days after the operation, proves it to have been justifiable.

I relate the case more to prove with what ease labor can be induced, and that the operation should be performed early, than for any particular interest surrounding this particular case.

HYSTERICAL MANIA.

By F. K. Bailey, M. D.,
Knoxville, Tennessee.

March 26, 1872, was called to visit Mrs. S., aged about 30. Strong, bilious, nervous temperament. Married, and mother of one child, a fine looking boy of 12, by a former husband. Married to present husband in January, 1869. Since her last marriage has menstruated pretty regularly till within a few months past. Has had leucorrhœa, and was treated during the last six or eight months by a physician of this city. Improved under his care, and continued tolerably well till about the 20th of February last, when she missed the menstrual flow. Found her with some fever; tongue coated; bowels torpid; no appetite; restless and wakeful at night; pulse not over 95, small and rather soft.

Three days previous to my first visit she had called a homœopathic physician, who, with his potencies, had not made any impression upon the disease, or the confidence of the patient.

A few days before, she had an attack of rather free hemorrhage from the uterus, which had stopped before I saw her.

Placed her at once upon the use of bromide of potassium, in six grain doses, with bitter tonics and small draughts of whisky and water, and egg-nog, at each meal time. Gave comp. rhei pills at night. In a day or two she became better in strength and spirits, with a diminution of fever, and an increase of appetite, and in less than a week could walk about and attend to household duties.

I omitted to state that upon a digital examination per vaginam, I found the os uteri somewhat patent and flabby. The whole organ increased in size, but mobile.

I saw no more of my patient until the morning of the 26th of April, when she called at an early hour at my residence. Her object in calling, as she then said, was to obtain my opinion upon the question of her being in a family way. On my informing her that it was impossible to decide so important a matter at that time, she appeared disappointed, and declared that a doctor ought to know such things, and that if I would not give her a decisive answer, she would go to some other physician, till she could be satisfied as to her status.

Perceiving that she was rather too solicitous for any practical purpose, I merely told her that such *might* be the case, and that remark being in accordance with her wishes in the matter, she went away apparently satisfied. At night, however, I was requested to see her. Found her somewhat excited mentally and physically. She said there was a rolling or moving about in the lower part of the abdomen, and that it was certainly a living child. Found on passing my hand over the hypogastric region that there was some fullness, and a throbbing in the left side. The heart beat rapidly, and with considerable increase of impulse. The abdominal aorta also throbbed very hard, and so much so as to lift the bed clothes. Pulse 100 or more. Learned that she had not slept at all during the night previous to calling upon me, and that the whole burden of her thoughts was upon what was rolling about in the pelvis. Prescribed pulv. Doveri in five grain doses every four hours, alternated with bromide of potassium and bromide of ammonium.

27th. Much the same as yesterday. Still intent upon the moving or rolling in the right iliac region, and manifests decided indications of mental aberration. Is peevish and dissatisfied with everything. Cannot

sleep quietly, and is disinclined to eat much. Bowels still constipated. Gave podophyllin and leptandrin at night; also bromide of potassium and ammonium. Introduced cylindrical speculum, and found os dry and cervix bluish.

Sunday, 28th. Bowels opened. Unchanged in general appearance. Uterus somewhat prolapsed; os in hollow of sacrum. Considerable arterial excitement. Impulse of heart much increased, and abdominal throbbing still very strong. Conversation almost wholly upon a fancied rolling or moving in the uterine region. Considerable tenderness on pressure over the uterus, with general hyperæsthesia over whole abdominal region. Tongue still coated; thirst, and desire for cold drinks. Continue bromides.

Monday, 29th, 7 A. M. No better. Still dwells upon the sensation in right side of pelvis, and insists upon having the womb "fixed," or "placed right." Continued bromide of potassium. 3 P. M. Dr. S. D. Moses in consultation. Talkative, and thoughts wholly upon condition of pelvic organs. Introduced bivalve speculum, and found a somewhat engorged, pale bluish hue of the vaginal mucous membrane, as well as the uterus. Womb enlarged, with a hardness at every side. Did not explore the organ, as pregnancy might possibly exist. Dr. M. suggests application of carbolic salve to the vagina on a pledget of cotton; also that she take ten grains of calomel at night, which was given at bedtime.

Tuesday, 30th, 7 A. M. Has been raving all night; scarcely possible to keep her on the bed. Inclined to tear her clothing, and to catch hold of the bedstead, to either push or pull. Will not tolerate bed clothing upon her. 3 P. M. Administered chloroform, both to quiet her, and enable us to give an enema, as no action from the bowels had occurred for a day or two. Succeeded in bringing away some small lumps, with considerable flatus, being the first that had passed since taking the calomel. The enema was composed of watery solution of assafœtida, with sulphate of magnesia and spirits of turpentine.

There was no abatement of symptoms during the night, and in spite of ʒj chloral, with bromide of potassium, and inhalation of chloroform, she struggled without cessation till morning. During the day (May 1st) there was a little quiet, but only a few minutes at a time. For a week, or until the 8th of May, she continued delirious, with but short intermission. Urine would pass but once in twenty-four hours, and then from an apparent inability to hold it longer. It was generally light colored, and free in quantity. It was sometimes passed in bed, and at other times while standing upon the floor. The bowels were moved imperfectly by means of enemata administered at times when the raving was least. I gradually increased the amount of bromide of potassium till she was taking regularly every four hours 15 grains, with the bromide of ammonium. I commenced giving on the 2d or 3d, 20 drops fluid extract cannabis indica, and the same dose of fluid extract of ergot. It being necessary to force every dose into her mouth by prying the jaws open, and to hold her nose to compel swallowing, it was not always certain that the whole amount was received into the stomach, but in the main there was the above stated amounts of the several agents taken.

After a day or two, could be seen a disposition to sleep, and on the 10th she began to be quiet three or four hours at a time. During the whole period embraced in the above notes she was not still for a moment. At times it was not possible for four persons to keep her upon the bed. The struggles, and that word is as expressive as any, were terrible, while at the same time the muscles of the face were scarcely ruffled. The face was sometimes reddened, and the veins of the forehead enlarged, but generally there was but little excitement in the extreme vessels. The heart and abdominal aorta, however, would beat tumultuously. The conjunctiva became somewhat congested after a few days, and at times there was a profuse water-flow from the eyes. On the 8th or 9th a slight show commenced, which continued about four days. After about twenty-four hours from the commencement of the flow she began to be more quiet, but it had stopped before there was much quiet sleep.

16th. For the last three days she has slept about one-third of the time. The period of quiet would commence about 9 P. M., and continue through the night. Next day she would scarcely close her eyes, but lie upon the bed without severe struggling, but never still. She has been so weak for a few days past that she could not make much exertion. There was one night and day since the 12th that the cannabis indica

was suspended, and that was the most uneasy period for some days.

The bromide of potassium was given in about 8 grain doses after she became more quiet, but the cannabis, with the exception alluded to, has been given constantly in not less than 15 drop doses. The ergot was suspended about every other day. During the whole period embraced in the above statement, no nutriment was taken but buttermilk, which she would at favorable times swallow without objection. No other food would she take till within the last three days. The pulse to-day is about 95, but it has ranged, when I was able to count it, at about 120, during the whole period.

No notes were taken in this case from day to day, and consequently, details cannot be given. Suffice it to say, however, that the general appearances were, in kind, those generally described as hysterical, but in degree and continuance they were worse than I have ever before witnessed.

It seemed that every feature, as described by the multitude of writers upon hysteria, was at one time or other embodied in the gyrations of this case. For two or three days past there has been an occasional dawning of normal mental condition, such as calling for water, or asking to be helped up. Generally, however, there has not been any appreciation of what was going on in the room. For more than a week past there has been but one evacuation from the bowels at all fecal in its character, but flatus escaped often. The abdomen has been very flat, and evidently contains nothing but gas. An occasional enema has been administered, with the effect to relieve local heat and dryness in the rectum. Sulphate of cinchona has been given with the other medicine, in 2 grain doses. 7 P. M. Restless during the day, but slept more than yesterday. No action from bowels. Has urinated freely. Will not speak often, but answers by signs when questioned. Taken no nutriment but buttermilk. To continue medicine with sulphate of cinchona, and have an enema.

17th, 7 A. M. Has slept nearly all night. Enema came away with no fecal matter, but the water was stained yellow. Pulse 96, and fuller than it has been generally. To continue same medicine. 7 P. M. Has been restless all day. Urinated, but no movement of bowels. Ate a very little, and drank buttermilk. For some days past there has been no discharge of any kind from the vagina, but the attendants speak of a very offensive odor therefrom. During the day it has been difficult to get her to take medicine, and consequently much has been wasted in the attempt. Pulse not over 100. Tongue for some days has been cleaning off, and at present it is free from coat.

18th, 7 A. M. Slept most of the night, and found her sitting in a chair this morning. Will reply by signs to questions, but does not talk. Acts *contrary*, to use an expression of the family. Eats a little, and drinks her usual beverage. To take bromide of potassium, 10 grains, with cannabis and ergot as before, during the day, with sulphate cinchona. It is evident that the agents employed have the effect to quiet her; for when, for any reason, they are suspended, there has been an increase of excitement. 8 P. M. Restless during the day. Pulse about 100. Will not speak. Wept when a little niece came into her room, whom she had not seen for some time. No perceptible improvement in her mental condition. To continue medicines.

19th, 7 A. M. Slept after midnight, but was very uneasy previous to that hour. Pulse 84, and full. Condition unchanged. Will eat but very little, and only drinks water and buttermilk. Continued bromide of potassium in 8 grain doses, with 15 drops each of ergot and cannabis.

20th, 7 A. M. Slept during the night, but is still silent. Pulse 85. Still heavy throbbing of abdominal aorta as low as the bifurcation. Free evacuation from bowels last night, from an enema, bilious and lumpy. To continue bromide potassium with cannabis, suspending the ergot.

21st, 6 A. M. Was more quiet than usual through the day, yesterday, and slept all night. Pulse 100, but very regular. Walked about the house yesterday, and ate more than at any other time. Sulks little or none, but will cry at times, as if deeply grieved. To continue bromide of potassium and cannabis three times daily, with 3 grains sulphate of cinchona, which, I will remark, she has taken two or three times daily for nearly a week. Directed that she have leave to walk about and to eat anything she may desire.

22d, 6 A. M. Was uneasy yesterday, but not violent. Bowels moved freely at 9 P. M., from an enema. Slept pretty well last night, and quiet this morning, but does not talk. Was quite talkative at times yesterday. More inclined to eat. Is able to get up and walk about the house. Pulse

100, and about normal in fullness and strength. To continue bromide of potassium, cannabis, 15 drops, with sulphate of cinchona, 2 grain doses.

23d, 7 A. M. Passed a quiet night; slept well. Less uneasy yesterday through the day. Ate more, and sat up most of the time. To continue sulphate of cinchona, bromide of potassium, and 10 drops extract cannabis every four hours.

24th, 7 A. M. Bowels moved freely last night, from an enema. Slept most of the night, and has eaten more this morning than usual. To take 15 drops extract cannabis, and omit bromide.

27th. Since last report she has been more quiet during the day, and has slept well each night. Appetite improving, and has an occasional lucid interval, in which she will talk, and manifest some interest in family affairs. Her tongue, which I had not been able to inspect for many days, is red, and has the appearance generally seen after enteric fever. Teeth and gums covered with brown sordes, and the inside of the lips are a bright red. Bowels have moved freely for the last four days, after an enema of warm water. Stools fecal, and attended with flatus. Urine abundant, sometimes clear, and again dark and offensive. No vaginal discharge of late. Has taken since the 24th about 5 grains bromide of potassium, with 10 or 15 minims fluid extract cannabis. For the last twenty-four hours she has taken medicine without objecting, and the first for the whole term of her sickness. With each dose of medicine above, about one grain of sulphate of cinchona has sometimes been added. I will add, that the pulse has generally been about 75, soft, and tolerably full. Occasionally, at 7 P. M., it would go up to 90 or 100. The heavy beating in the abdominal aorta has gradually lessened of late.

28th, 6 A. M. Has had a restless and sleepless night. Bowels moved freely, from an enema, about 9 last night. Yesterday she took up some iron instrument and struck herself a severe blow upon the occipital region. Inclined to eat this morning, but no more appearance of sanity.

Having diminished the amount of medicine for a few days past, it is probable that the increased uneasiness of a day or two past is a result. Accordingly I directed that she take bromide of potassium, 8 grain doses, and 15 drops extract cannabis, with sulphate of cinchona.

June 3d. No change since last report. Has taken the same medicines, but in diminished doses, and she has been more quiet. The bowels have been moved every other evening by means of an enema. Generally the urine has been evacuated only when the bowels were moved. Has taken some food, but at irregular intervals. Will protrude her tongue now with some urging, and I find it red and clean.

6th. Will sleep the entire night, and a portion of the day. Has taken no medicine for three days, except about 2 grains sulphate of cinchona four times daily. Generally quiet, but at times inclined to injure herself. It is noticed that she becomes more restive when the bowels are loaded. Immediately after an alvine evacuation she will lie down and go to sleep. Appetite still capricious. To continue sulphate of cinchona.

9th. Slight show to-day. No further developments in the case. Can sleep at night, and eats more. Will not talk much, and is rather sulky.

11th. Sleeps well at night, and some during the day. Will eat heartily once a day, and sits up or walks about most of the day. Pulse has been small and soft for the past week, and the throbbing in the abdominal aorta at times scarcely felt. Has taken but little medicine for a few days, and the bowels have been moved by enemata administered at night.

25th. Since last report she has been quiet, but silent and inclined to a brown study. Slept well at night, and bowels moved by enemata.

July 10th. Since last report there has been a disposition to injure her little boy, but is kind to her husband's children. Walks about during the day, but requires watching. Appetite improving.

20th. Has all the appearance of an insane woman. For ten days past has been unchanged in appearance, took no medicine, and had the bowels moved by enemata when necessary. No indications of a return of the catamenia. The throbbing nearly ceased in the abdomen. Pulse normal.

Aug. 1st. Considerably improved. Went on a short visit to a neighboring town. Begins to be more natural.

10th. Returned home a few days ago, and appears nearly well. Has gained in flesh, and will converse if questioned. Attends to household affairs. Menses returned last night for the first time to any amount since

the attack. We hope convalescence is becoming established.

Sept. 3. Health nearly restored, and manifests no mental aberration. Has regained her usual weight, and the functions regular.

There were many interesting features in this case, and the manifestations, doubtless, of a hysterical character.

The effects of the bromides, with cannabis and ergot, were very apparent.

Such cases are among the most intractable that we are called upon to treat. The intimate relation existing between the uterus and brain is very obvious, and the foregoing afforded a rare opportunity to observe phenomena of a reflex character.

Editorial Department.

Periscope.

Operative Treatment of Rupture of the Bladder.

The following review of the surgical treatment of this lesion is by Dr. E. Mason, in the New York *Medical Journal*:—

The various methods of operative interference which have either been proposed or put in practice, with the hope of better meeting the necessities of the case, and thus rendering this accident less fatal than it has proved under the accepted and old-established course of practice, may be grouped together under the following heads:—

1. Opening the bladder above the pubes, as in the high operation for stone, or else simply tapping the organ in this locality.

2. Tapping the cavity of the pelvis either above the pubis, or the pelvic *cul-de-sac* through the rectum.

3. Perineal section, and then dilating the membranous portion of the urethra and neck of the bladder, as in the median operation for stone.

4. Opening the bladder either by the lateral or bilateral method, as in lithotomy.

The first method, viz., opening the bladder above the pubis, at first sight, especially where the anterior portion is supposed to be the part ruptured, and the urine has extravasated into the areolar tissue, might strike us as being very timely, as through this means both extravasated blood and urine might readily be removed. But when we consider that extravasation as a rule takes place rapidly, and at the moment of laceration, and, as a natural consequence, collapse—more or less extensive—of the viscus will immediately ensue, the value of this operation, as a means of preventing secondary trouble, to our mind, is not very great. Indeed, it seems that about all that we might hope to accomplish, in the majority of cases, could be obtained through the simpler means of free and deep incisions made in this region.

The danger alone of wounding the peritonæum, if not already injured in our attempts to open a collapsed or contracted bladder in this locality, and thus adding a serious complication to an injury already sufficiently grave, would be enough to make us hesitate in selecting this course of procedure, especially when another seems to hold out more favorable results.

As far as I am aware, this operation has been put in practice but once, and this at the late New York Hospital, in a case of supposed rupture of the anterior part of the bladder. Here the peritonæum was wounded in the operation; some hours afterward perineal section was performed, and the organ was then discovered not to have been lacerated, but, as the autopsy subsequently showed, rupture of the urethra close to the neck of the bladder had taken place.

The risk that we may be in error as to our diagnosis in some cases, as the above case shows, must also militate against this operation.

With respect to paracentesis either above the pubis or of the pelvic *cul-de-sac* through the rectum, which is the second method we have spoken of:—

Boyer (Maladies Chirurgicales, tome ix., p. 61), while remarking upon a case of lacerated bladder, says that no relief can be afforded in this class of injuries; the paracentesis of the abdomen, and retaining a catheter in the bladder, are the only surgical efforts that can be attempted; but, before paracentesis can be performed, the fatal peritonitis has sealed the doom of the patient.

With this opinion Dr. Harrison says he does not fully concur, his own being that in paracentesis we are to find the great remedial agent; but, as the effused urine is chiefly found in the pelvic *cul-de-sac*, we are to tap this locality; and he has therefore proposed that in these injuries this *cul-de-sac* be tapped through the rectum. "Should the parts," he says, "be in that state in which dissection has shown them in some cases to have been, we may suppose that the pelvic *cul-de-sac* is distended with fluid, coated with lymph, and well protruded toward the rectum, or between this and the bladder; that the latter viscus is empty and rather small, and that adhesions have nearly closed the pelvis above, and separated it from the

abdomen; if a small opening be now made through the rectum into this *cul-de sac*, the irritating fluid may be discharged without injury to any important part; indeed, the opening into this new and circumscribed cavity cannot even open into or affect the general peritonæum, provided the superior pelvic and vesical adhesions have been perfect; in fact, a new cavity has been formed, coated internally like an abscess, and containing a foreign and an irritant fluid, and the operation now suggested is merely opening this in the most depending situation."

In addition to this, he recommends retaining the catheter in the bladder, and the free administration of opium. This operation Mr. Harrison believed to be in accord with the sound principles of general pathology; he had no experience in its favor, but was led to this view from the appearance which the autopsy of several cases had presented.

This mode of treatment was proposed to the profession in 1836, but we are yet to learn that it has ever been put in practice.

At first sight it certainly may appear very plausible, and in theory, as regards the necessity of giving vent to extravasated urine, it undoubtedly is correct. The objections to this operation strike us as follows: It, in the first place, is not suitable to all classes of cases; for we must bear in mind that, though in the great majority of cases of ruptured bladder the rent is in the posterior portion and through the peritonæum, yet there is a proportion of cases where the laceration is superior or anterior, and, the peritonæum not being wounded, the urine does not collect in the pelvic *cul-de-sac*, and we are not always able to say to which variety a case may belong. Again, in the performance of this operation, we fear that the bladder might be opened rather than the *cul-de-sac*, there being a number of cases in which the autopsy has disclosed this organ, though torn, to contain considerable urine; and this fact was evident in our case, as well as others we have seen reported, from the ability of the patient to pass water himself.

Another danger lies in the risk we may run of wounding a coil of small intestine, or the rectum itself.

These are the only three cases out of seventy-eight, as collected by Dr. Smith, where the *post-mortem* appearances revealed such a condition of things, and it is very evident that Nature could only so protect herself after an interval of some days; whereas, were we to wait for these adhesions to form, in by far the greater number of cases, death would relieve the patient before the surgeon.

In respect to the *third* mode of treating these cases, namely, by perineal section, and then dilating the membranous portion of the urethra and neck of the bladder with the finger, as in the median operation for stone, we know not by whom it was first suggested, though we are aware that it has been followed in at least one case in this city, and probably in several.

This case was in St. Luke's Hospital, and was operated on by Dr. Robert F. Weir. The accident occurred in a middle-aged man, by his being caught between a ferry-boat and the bridge. Upon introducing the finger into the bladder, the doctor discovered that the pubic bones were fractured, and projected through the anterior wall of the bladder. This case resulted fatally.

Though this operation is a decided advance in treatment over the one we previously considered, yet its disadvantages seem to us to consist in the fact (which is claimed as one of its advantages by the advocates for the median operation in lithotomy) that after this operation the patient is not troubled by the urine dribbling away from him, and, if not at once, he very speedily possesses control over his bladder.

That this is the case, no matter how thoroughly the neck of the bladder is dilated, unless it be lacerated in the removal of the calculus, all are aware who have had experience in the median operation for stone. This, then, being the case, wherein, by this operation, have we taken any steps to prevent the urine again soon finding its way through the rupture in the bladder? Our only plan to prevent such an occurrence, as a consequence of this operation, it appears to me, would be frequent dilatation of the neck of the bladder, and this certainly would be a most serious objection.

We now come to the *fourth* and last method which has been practiced in these critical cases, and the one which we desire earnestly to advocate, viz., the opening of the bladder freely by means of the lateral or bilateral operation, as for stone.

To American surgery belongs the honor of having given to the profession this mode of treatment; and to Dr. William J. Walker, of Boston, belongs the credit of having first put in practice, and I believe also that of originating this plan of treatment.

Dr. Walker's case was that of a man, aged twenty-three, of sound constitution, and of temperate habits, a railroad-conductor by occupation, who was caught, during an accident, between the engine and a car. When the doctor saw him, which was twenty-four hours after the accident, he presented the symptoms of a man passing into collapse. A tumor was observed extending from the whole line of Poupart's ligament nearly to the umbilicus, almost as large as the open hand, and elevated above the surface an inch and a half; the case was also complicated by fracture of the pelvis at the symphysis pubis. A catheter was introduced, and several ounces of urine withdrawn, whereupon the tumor referred to disappeared, and the bladder was then opened, as in the lateral operation for stone, and immediate relief followed. The fracture was found to have united twenty-five days after the accident, and in fifty-five days from the time of injury the patient resumed his occupation.

Chloral Hydrate in Epileptic Puerperal Convulsions.

Dr. F. V. McDowell describes the following case in the Dublin *Medical Journal*:—

On March 1st, 1871, at 2 P. M., I was called to see a poor woman in labor, named Ellen B., aged 40, living in this district. I was told she had been in "fits" all the day. She is the mother of seven children; the last was still-born, and her health has been very delicate since. For the past month she complained of giddiness and noises in the head, and puffing of the face. On my arrival I found her suffering from epileptic convulsions. The paroxysms occurred periodically, like labor pains, during one of which, and shortly after I had seen her, she gave birth to a still-born child. The placenta was soon expelled without any assistance, and with very little loss.

The patient was totally unconscious, and breathing very heavily; however, the convulsions did not end here, but after a few hours became more frequent.

At the approach of each paroxysm the pulse would become extremely quick and weak, the pupils dilate, the skin turn dark or purple, and the muscles become extremely rigid from head to foot, but would soon be thrown into violent convulsions, during which the distortion of countenance was beyond conception. There were frothing and hissing from the mouth, which was drawn chiefly to the right side, her urine and fæces passing involuntarily. Her head was shaved with much difficulty, four leeches applied to each temple, an opiate enema administered, and cloths soaked in iced water to be kept constantly on the head.

The "fits" which, previous to this treatment, occurred every hour, and each lasting about ten minutes, were completely checked, and the woman left sleeping tranquilly.

Heard next morning she awoke *quite well*, but after three or four hours became light-headed.

Saw her next day, and she was then totally unmanageable; the delirium and jactitations were incessant, restraint being sometimes necessary. The patient was now placed in a darkened room, with a careful attendant, the cold application to be kept to her head, and a large blister applied to the nape of the neck. A full dose of calomel and jalap administered, and after its operation two grains of James' powder and half a grain of opium, to be given every three hours for six doses. For five days there was no abatement of the maniacal symptoms, and as the patient had not slept any during that time I determined, as a *dernier resort*, to give chloral hydrate a trial, as I had never heard of its use in such a case before. Twenty-five grains were administered in syrup, and repeated after three hours. This seemed to act as a charm, for the woman had a refreshing sleep of three hours; and a repetition of this treatment for a few nights effected a complete recovery, as a proof of which I may mention I received a visiting ticket on the 5th of March this year, to see her again in labor, and as I found the os well dilated I applied a long forceps, and delivered her of a fine living child, and both are doing well.

It will be seen the above was a remarkable case, and those experienced in dispensary practice can well realize the difficulties of such, the convulsions occurring during and after parturition, and terminating in mania.

On Hæmoptysis.

Dr. Nason remarks, in the Dublin *Medical Journal*:—

The fact that hæmoptysis is not constantly prior or subsequent to any organic disease of the thoracic viscera has been frequently substantiated. Many people during puberty having suffered from repeated attacks of hemorrhage from the respiratory organs, still arrive safely at the goal of ripe old age, leaving at their death no appreciable pathological signs of their ever having suffered from it. Though such is sometimes the case, we should still regard every case of hæmoptysis coming under our notice with suspicion, and endeavor to arrive at a knowledge of its direct cause. The more obscure this is, the less we should relax in our attempts to discover its origin. Hæmoptysis through mere exsanguinification, except, of course, such a hemorrhage as would result from either a wound or the bursting of an aneurismal sac, is seldom directly dangerous to life. Though it may occur, as above stated, in persons whose lungs during life afforded no physical signs indicative of its origin, or after death exhibited no traces of its ever having taken place, and though, as several well authenticated cases prove, it may but supplementalize suppressed menstrual, hemorrhoidal, or other hemorrhagic discharges, still it must never be looked on with unconcern.

Hemorrhage from, if we may use the term, healthy lungs, even though it may sometimes relieve nature of a surplus of blood, must, however, have a deleterious effect on the system. In large quantities, and of frequent recurrence, it tends to produce anæmia, one of the most favorable fields for the development of diseases of the chest. Mechanically it at times causes more or less local injury. The extravasated blood in hemorrhage from the respiratory organs is not always immediately expectorated; the retained portions may form into clots, which act as foreign bodies on their surrounding walls, having quite as great an irritating effect on the parts in their vicinity as a coagulum in a vein would have on the vascular tissue. This I have seen verified by some *post-mortems* of those who had suffered from hæmoptysis a short time previous to death, in which coagula bearing an apparently complete resemblance to old thrombi of the veins were discoverable in the bronchi. In addition to these circumstances, supposing after one single moderate attack of hæmoptysis, the lungs are completely freed

from the presence of extravasated blood, the very process necessary to healing of the blood vessels from which hemorrhage has taken place, if similar, as we have good reason to suppose it is, to that which occurs in the large blood-vessels, namely, adhesive inflammation, though for manifest reasons necessary to the vessels themselves, cannot but be sympathized with by the surrounding parts, and often to no good purpose.

Hæmoptysis, as the result of disease, is said to be most constant in its attendance on heart disease, especially that of contraction of the mitral orifice, accompanied by valvular insufficiency. In this form of heart disease more than any other we have the lungs often subject to a considerable pressure of blood, which, in addition to the, in this disease, usual quality of the latter, the relaxed condition of the system in general renders the walls of the blood-vessels unequal to the task imposed on them. Hæmoptysis dependent on disease of the heart, though perhaps for the first time of no great importance, and is, as Trousseau expresses it, "less fulminant than bronchial hemorrhage occurring in phthisis of tuberculous origin," still has a tendency to increase both in volume and frequency as the heart disease approaches its fatal termination. Repeated attacks of hæmoptysis resulting from disease of the heart, in addition to, by depravation of the blood, favoring the production of anasarca and other complications, is, particularly in chronic cases, which cases of mitral valvular disease mostly are, sometimes followed by pulmonary consumption. One case of this kind I remember. The patient, a woman aged twenty-three, with no traceable phthisical hereditary predisposition, had, when thirteen years of age, rheumatic fever, followed by disease of the mitral orifice, for which she had been in hospital, when about twenty-one years old, affording at that time no physical signs of any organic disease of the lungs; had experienced several moderate attacks of hæmoptysis, and during the time I was acquainted with the case, softening of the middle lobe of right lung took place with the formation of cavities.

In chronic cases of phthisis, pulmonary hemorrhage is more frequently followed by immediately fatal consequences. Here the circumstance of the often extremely limited area of healthy lung tissue, capable of oxidizing the blood, being interfered with to any extent, must terminate life. This happens most commonly in either of two ways, viz., either simply direct suffocation from the mass of extravasated blood occupying the air passages and cells of what remains of healthy lung tissue, which does not possess sufficient power to reject it, or else through secondary inflammation in that part, occasioned by retained portions of blood acting as foreign bodies.

Besides the many exciting causes for hæmoptysis in phthisis commonly given by authors, I am convinced that it is often the effect of (if such an expression is allowable) the too rapid improvement of patients, the making more blood than the limited space of the breathing surface is sufficient to aërate, thus affecting an hyperæmic condition of the lungs, which relieves itself by hæmoptysis. This is of common occurrence in hospital patients, who, on their entrance into such an institution, especially into one devoted to diseases of the chest, often change for a generous nourishment, for an equable temperature, for a life for the time being devoid of many of the petty cares of this life, an abode little better than a cabin, with all its concomitant miseries. As bearing this out I call to mind two cases, one a fine young unmarried woman, with upper portion of both lungs in the third stage of phthisis, who had been an inmate of the Brompton Hospital for three months, whose chest symptoms had during that period been sensibly ameliorated, and whose weight had in that time been increased by 24 lbs., and who had herself felt so much improved that she doubted of many of her friends being able to recognize her on her return home. With but little warning hæmoptysis set in, followed in the course of thirty-six hours by an acute attack of capillary bronchitis, which put an end alike to her doubts and existence. The other, a married woman, also with the superior portions of both lungs excavated, intended to have left hospital the next day, with chest symptoms greatly improved, no moist sounds, and weight considerably increased, was suffocated by a sudden attack of hæmoptysis. In these cases, no doubt, the weakened or diseased blood-vessels, unable to support the additional strain imposed upon them by the increased quantity of blood, gave way, and were followed by fatal consequences. However, cases of hæmoptysis during phthisis occur, both frequent in repetition and large in volume, without having any very apparent immediate deleterious effects on the patients, except that of weakening them for the time. One case with an enormous cavity in left lung, who for three months out of three consecutive years had been an inmate of Brompton, expectorated during those nine months about five pints of blood. The first year her weight was 128 lbs.; the second, 125 lbs.; the third year, 124½ lbs., and physical examination showed during those several years but slight increase in the disease of her lungs.

The portion of the respiratory organs from which hemorrhage in hæmoptysis takes place has been frequently the subject of dispute. Dr. W. Hayle Walsh denies that bronchial hemorrhage is common, and he asserts that in the majority of cases, when blood in any quantity has made its way into the bronchial tubes, even when heart disease is present, it will be found that the parenchyma of the lung, and not the mucous membrane, has given way molecularly. Niemeyer, on the other hand, states that bronchial hemorrhage is by far the most common, while Trousseau, taking a middle course, considers that hæmoptysis in phthisis occurs ordinarily from the surface of the

bronchi, but that hæmoptysis in heart disease is more generally parenchymatous, viz., taking place first in the air vesicles of the lung.

That it is generally parenchymatous, accompanying heart disease, is but natural to suppose; but occurring independently of that disease, from the lung substance, must but very seldom be uncomplicated with organic disease of the pulmonary tissue.

Hemorrhage from the Bowels in Typhoid Fever Treated with Turpentine.

Dr. S. WEED reports the following cases in the Buffalo *Medical and Surgical Journal*:—

Case 1. In the evening of the 2d day of September, 1852, I was requested to visit W., a boy of sixteen years, with typhoid fever, some two and a half miles distant, and who had been under the care of another practitioner some two or more weeks. I was told that the case was one of great urgency, since an unfavorable prognosis had been given. On arriving at the bedside I was informed that blood, in large quantities, was passing from his bowels at each frequent evacuation. Found patient exceedingly restless from pain and tympanitic distention of the bowels. Skin dry and burning, pulse extremely rapid and thready, tongue dry, clean, and with dark papilla, with sordes on the teeth and lips. The prognosis, indeed, seemed most unfavorable.

Some turpentine was procured, and I administered a teaspoonful in some sugar and water, and in fifteen minutes as much more. After the expiration of an hour I gave half the quantity in the same manner; and then ordered that in two hours twenty drops should be given, and so on every two hours, until I should see the patient again the following morning.

Sept. 3d. Symptoms much improved. Pulse slower and fuller. Less heat of surface, with a tendency to perspiration. Expression of countenance less anxious, and from the character of the stools I was fully convinced that the turpentine had controlled the hemorrhage almost immediately after the first dose had been taken. For the next twenty-four hours I ordered the remedy to be given in twenty drop doses every four hours.

Sept. 4th. Patient still improving. Symptoms all better. No more hemorrhage. But the turpentine was so obnoxious that I reluctantly discontinued its further use until I should see him again, and substituted a tonic in its stead.

Sept. 5th. Hemorrhage had returned with symptoms of a very threatening character. I now prescribed the turpentine again, to be given in twenty drop doses, at first, every two hours for three or four doses, depending upon the symptoms, and then every four hours until I should see him next day. Without extending the report of this case further, I will briefly state that I continued the remedy some three or four days; at the expiration of this time convalescence was fully established, and without further drawback went on quite rapidly to complete recovery; there being no more hemorrhage.

Case 2. On November 13th, 1865, I was requested to visit M., a girl of eleven years, with typhoid fever, in great haste, and earlier than was my custom; and whom I had been visiting daily for some two weeks. She was represented to be dying from hemorrhage of the bowels. On arriving at the house I was told that the bed pan had once been emptied, and that the quantity of blood it contained was about the same as was then in it, which appeared to be not less than one pint. She was nearly pulseless, and had every appearance of one dying from loss of blood. Her mother was so strongly impressed with the conviction that there was no hope, that it was with much difficulty I could persuade her to assist me in giving a teaspoonful of oil of turpentine, in mucilage, to her daughter. We, however, succeeded, and at the expiration of an hour repeated the dose. I then prescribed twenty drops to be taken every two hours until I should visit her again. Called in the evening and found symptoms improving. Was satisfied that the first dose of turpentine had controlled the hemorrhage as if by magic. Continued the remedy some three or four days, when convalescence being fully established it was discontinued. The recovery in this case was very satisfactory.

Case 3. Was that of C., a young man of about twenty-one years, living some four miles in the country, whom I attended in a long run of typhoid fever, of a severe type, my visits extending from December 19, 1865, to January 13, 1866. There was much delirium and disturbance of the bowels during its progress. In the third week of his illness he had an attack of bleeding from the bowels, which was very readily controlled by the use of the oil of turpentine. Patient recovered.

Case 4. On the evening of December 19, 1865, I was requested to visit Mr. B., of middle age, who resided in an adjoining town, and who had been under the care of a neighboring physician between two and three weeks. I found him with the usual symptons of a mild type of continued fever. There was considerable debility for the amount of fever, night sweats and derangement of the bowels; but under the influence of tonics and stimulants, with suitable nourishment, he began to improve, until after having made nine visits, I ceased my calls, with the injunction that should hemorrhage from the bowels show itself at any time, I was to be without delay notified. This was the only apprehension I had respecting his recovery without a drawback. We were having many cases of typhoid fever at this time, and many of them were fatal. The next evening a messenger came in great haste to let me know that Mr. B. had had a large evacuation of blood from the bowels, filling the chamber or vessel nearly, if not quite, half full. I prescribed the oil of turpentine

as in former cases; at first in teaspoonful doses, and then smaller ones as the urgency of the symptoms seemed to demand. The effect of the medicine was all that could be desired. The first dose operated to stop the hemorrhage. Patient recovered without any other unpleasant symptom.

On Nutritive Enemata.

A valuable suggestion has recently been made by Dr. W. O. LEUBE, of Erlangen (*Deutsches Archiv fur Klin. Medic.*, vol. x). Starting from the idea that it would be best to let the digestive changes which must necessarily precede absorption go on in the rectum itself, with its equable temperature, he devised a mixture of food and digestive ferment, which, he found, is easily retained in the rectum from twelve to thirty-six hours. The digestive ferment is the fresh pancreas of the ox or pig, which, finely minced, he mixed with scraped meat, rubbing them well together with a little warm water, so that the mass may be easily injected. The most suitable proportion is one part of pancreas to three of meat. Fat may be added, but its quantity ought not to exceed one-sixth of that of the meat. Before this food is injected, the rectum ought to be washed out with water. Dr. Leube mentions that the first enemata sometimes apparently remain undigested, but that this must not prevent their being continued. Generally, the fæces resulting when this food has been retained sufficiently long have the character of ordinary fæcal matter. By a series of experiments, Dr. Leube has proved that by this method of feeding *per rectum* a considerable quantity of nitrogen is taken up into the system. In a dog, which for several days had been deprived of nitrogenous food, and whose system, therefore, was in a state of nitrogen-hunger, an increase in the nitrogen-elimination by the kidneys took place when these nutritive enemata were given; and, on the other hand, in several experiments on a dog, and likewise on a healthy young man whose system was in a state of satiation with regard to nitrogen, the quantity of nitrogen excreted through the kidneys was not materially diminished when most of the nitrogenous food was introduced by the rectum instead of the stomach. A chemical examination of the fæces remaining when the food had been retained long enough, showed that almost the entire quantity of nitrogen contained in the food had disappeared. The same was found with regard to fat; and in a dog that was killed on the second day of the experiment the epithelial cells of the mucous membrane of the colon were found filled with fat globules. Dr. Leube also relates three cases of patients in whom this method of feeding had been used, and has completely answered the expectations which had been formed from his experiments. Of particular interest is the last case, in which, in consequence of tincture of iodine having been accidentally swallowed, no food whatever could be taken by the stomach, and the feeding by the rectum had to be continued for more than four weeks. In all three cases the general condition of the patients was much improved, although the nature of the cases precluded any but temporary benefit, two of the patients suffering from carcinoma.

The New Treatments of Itch.

The following translation from the German of Professor ROTHMUND, we quote from an English source:—

The remedies hitherto in use for itch, such as Wilkinson's sulphur ointment, Hebra's tar soap, Vlemingx's solution, etc., are not to be compared, for certainty, rapidity, and pleasantness of cure, with *styrax* and *Peruvian balsam*. *Styrax* was first recommended in itch in 1865, by Von Pastau, of Berlin. It has shown itself a most efficacious remedy, due to its containing cinnamein, cinnamonic acid and resin. It is used as a mixture:—Styrax, ℥ij, ol. olivar., ℥j; or thus, styrax, ℥ij, alcohol, ℥ss, ol. olivar., ℥ij. Styrax is a good and cheap remedy, its only disadvantage being its very disagreeable smell. For children it is used in the form of soap. Balsam of Peru is even better than styrax for the cure of itch. It was first employed in 1853, by Bosck, and was strongly recommended by Bärensprung in 1864, on the strength of an extensive trial of it in the Charité Hospital of Berlin. Its component parts are cinnamein, cinnamonic acid, and resin. Balsam of Peru is preferable to all the other vaunted remedies, because the acarus scabiei is most rapidly killed by it; because it acts with rapidity, with certainty, and agreeably; because it does no injury to the skin; because it easily penetrates the skin; because baths are not absolutely necessary with it, and because it kills all the acari and their eggs, for when well rubbed into the skin it comes in contact with the eggs. As a remedy for children it is superior to all others. The children are first placed in a warm bath, then well dried, and forty drops of the balsam rubbed well in. This is to be repeated four or five times in the next twenty-four hours, and the cure is complete. It may be used in every form of itch in children with advantage. It has, to be sure, no effect on the eczema scabiei; for this, soap baths, starch powder, or glycerine inunctions are required. In adults the best plan is to rub in the balsam of Peru all over the naked body, slowly, carefully, and gently, giving special attention to certain parts of the body, especially the fingers. Although in the treatment of itch the rubbing-in cannot act mechanically, yet, whatever substance may be used, the mode of preparing the inunction is of great importance. As the balsam is readily distributed, nine grammes of it suffice for one operation. It is not at all necessary to begin the treatment with a bath; but if a bath is first given, the rubbing-in should not follow the bath im-

mediately, as the balsam is more rapidly absorbed by a dry skin. Hence, in persons who easily perspire, the skin should be well dried before the remedy is used. When the operation is carefully performed, relapses occur very rarely, and there is never any increase in the eczema that may be present. It is seldom that prurigo occurs after the itch. Should it occur, this disagreeable symptom is more readily removed by the internal use of carbolic acid than by warm baths and soft soap or glycerine. The only objection to Peru balsam is its expense. Carbolic acid, on account of its efficacy, its facile employment, and its cheapness, deserves to be mentioned next to Peru balsam. It must be mixed with glycerine or oleum lini to prevent its caustic action. One scruple of acid. carbol. is to be mixed with two ounces of either of the two other excipients. This remedy has this advantage, that by its action on the peripheric cutaneous nerves it completely removes and prevents the morbid itching, prurigo, and pruritus. In cases of prurigo or pruritus, independent of itch, the internal use of carbolic acid in the form of pills is an excellent remedy. As the carbolic acid gets pretty quickly into the circulation, it is necessary to give it in very moderate doses, especially where there are parts destitute of epidermis. But as thereby its action is delayed, it is better to employ the carbolic acid in the form of a salt. According to Rothmund, natrum carbolicum supplies all the requirements of a good, rapid, and certain itch remedy. The following is the best way of using it:—

℞. Natr. carbol., fl℥xv.
Aqua destil., fl℥clxxx. M.

With this the affected portions of the skin are to be rubbed three times a day, and even in the most inveterate cases the treatment never lasts more than two and a half days; relapses are not to be feared, and if the rubbing-in is carefully performed no erythema to speak of occurs. During the treatment the patients are in no way hindered from following their usual occupations. One advantage of the Peru balsam and carbolic acid treatment of itch is that it is not necessary to disinfect the clothes or bed-linen. In order to make sure, Rothmund recommends an additional rubbing-in to be made some eight or ten days after the cure of the itch, in order to kill any acari or their eggs that may have lurked among the clothes or bed-linen.

Tannate of Quinia.

In a recent note made by Dr. LISBACH on quinium tannicum, this compound is said to possess many advantages over sulphate of quinine. Dr. Hager makes to this the following remark:—"After many experiments made on my own person and others, I have found that, as a febrifuge, tannate of quinine at the most is only 1-10th as effective as sulphate of quinine, and 9-10ths can again be found in the urine and fæces."

The Poisonous Qualities of Carbolic Acid.

Dr. HUSEMANN, in Gottingen, has made a series of experiments to establish beyond a doubt the question whether perfectly pure carbolic acid is poisonous or not, the latter theory being maintained by Dr. Hamberger, in the "Hygeia." The experiments were made with acids supplied by different manufacturers (Calvert's included), and the results obtained undoubtedly proved the very poisonous effects even of the purest acid.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

The Treatment of Syphilis with Subcutaneous Sublimate Injections. By Dr. GEORGE LEWIN. Translated by CARL PROEGLER, M. D., etc., and E. H. GALE, M. D. Philadelphia: Lindsay & Blakiston, 1872. 1 vol., cloth, 8vo, pp. 249. Price $2.25.

When such authorities as Dr. Drysdale (as we quoted a few weeks ago) condemn the use of mercury in syphilis as "too dangerous," while, on the other hand, eminent surgeons, such as Professor Gross, will not treat a case without that drug, general practitioners will gladly welcome any *media via* which gives us all the good effects of mercurials without any danger of their ill results appearing. This is what is accomplished, according to Dr. Lewin, by hypodermic injections of corrosive sublimate. From 1½ to 2½ grains are all that is necessary to effect a cure in most cases; out of some 1400 cases treated thus during four years, only 20 returned on account of syphilitic relapses. Certainly such results were most flattering.

Much of the present work appeared in the fourteenth volume of the "Annals of the Charité Hospital of Berlin," to which institution the author is an attending physician. He has tried the plan for seven years, in syphilis of almost all varieties, and though not pretending it is the only cure, he does hold it to be the best in numerous instances. He gives full instructions for preparing the solution, and administering it, and adds in detail, the indications for the operation in the many forms under which the venereal poison manifests itself.

The translators have done their work faithfully, and though we have marked several paragraphs which are obscure, or awkwardly worded, it would be invidious to specify them, in view of the great merit which the book as a whole possesses.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPT. 14, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

ERRATUM.—In Dr. Turnbull's article, on page 201, second paragraph, fifth line, a transposition of commas occurs. It should read: "rapidly absorbed, if given by the rectum, at the rate of double the quantity required by the mouth. It will in some instances produce," etc.

MEDICAL EXAMINATIONS FOR LIFE INSURANCE.

On more than one occasion, in the pages of this Journal, we have called attention to the disadvantages under which most examining physicians to insurance companies work. The more impartially they strive to do their duty toward the company which employs, the more do they excite the animosity of the local agents with whom they are brought in immediate contact.

The circumstances which thus oppress the honest, and favor the easy-conscienced physician have been forcibly set forth in an article by Dr. GEORGE S. STEBBINS, of Springfield, Massachusetts, in the *Spectator*, for July. He puts the objections to the system now generally adopted, so forcibly that it merits somewhat copious extracts at our hands. He says:—

"The companies very naturally look to their medical examiners to protect them, so far as possible, by rejecting all unsound risks, and accepting, or recommending only those which are free from everything tending to shorten their lives and render them uninsurable. Being thus dependent upon the integrity and professional qualifications of their examiners, it is natural to suppose that companies would select, appoint, and properly support and protect them; but the fact is, that many companies are the tools of the agents, and the medical examiners likewise too often bow to the will of the solicitors. If an agent is not honest, he does not want his medical examiner to be too conscientious, and he therefore solicits the company to appoint a physician whom he can control.

"If the medical examiner selected by the agent does not meet his expectations, proves to be a man possessed of some little conscience, has an opinion of his own, and persists in giving honest expression to it, is a man of good professional qualifications and sound judgment, and is governed by the same, being unwilling to sell his opinion for sake of place or position, that examiner is suddenly deposed, the agent solicits a new appointment upon some pretext or other, and the company generally acquiesces. This rule of action holds good with most agents and companies, so that a physician who insists upon the impartial and strictly honest performance of his duties cannot, and does not, hold the position as medical examiner for any length of time. Frequently, the agent will fill out his blank, consisting of the family record, often leaving out the most important matters, such as deaths from consumption, calling it instead 'debility,' 'fever,' or 'old age,' if they happen to die beyond the prime of life, and, when the medical examiner comes to fill out his certificate, he is requested to make his statements conform to the agent's; and, if he refuses, his time is about up, unless the decision of the agent should chance to be overruled by the company.

"In many cases where the agent is allowed to choose his own examiners at will, and one examiner fails to recommend an applicant, the agent will take the party to another physician, withhold information unfavorable in its nature, and get the candidate passed. I have even known of agents erasing remarks of medical examiners, and substituting something more favorable in

its place, remarking at the same time that he would not send the application with such a statement in it, for it would KILL it, he all the while little thinking that it is such applications and such agents that kill companies."

Fortunately, Dr. STEBBINS does not, after the example of too many reformers, thus destroy our confidence in the existing state of affairs without suggesting any method superior to the one in use. On the contrary, he shows that there is a simple, plain, straightforward way for a company to secure unbiased medical examinations. He very justly maintains that so long as local agents can control the selection and appointment of local medical examiners, through their influence with the companies, so long will these evils exist, for the unscrupulous agents will not lose an opportunity to secure a commission through any lack of intrigue or equivocation. In order to overcome these defects of life insurance, new safeguards should be established. The agent's and medical examiner's blank certificate should be *separate*, and not, as now, on one sheet, so that the agents could not see the examiner's report, and *vice versa;* then there could be no collusion between the two representatives of the company, and if there should be any conflicting statements in the reports rendered, the officers at headquarters could ferret out the truth.

Only one company, however, in the United States makes use of this simple precaution. In fact, it is to be feared that there is more than one company which prefer to take almost all sorts of risks, trusting to good luck, a prosperous start, extensive advertising, and a prescience when it is time for the Directors to "get from under," to carry them through.

As Life Insurance is generally conducted in this country, we cannot see how some companies can be depended on to pay their losses. Certainly we should not feel inclined to insure in them, from what we know of the manner in which their examinations are conducted in this city. We should as soon take stock in an exhausted oil well or an Arizona diamond mine.

THE CHOLERA EPIDEMIC OF THE PRESENT YEAR.

We have with some pains collected from our various European exchanges a connected history of the epidemic of cholera which has been advancing across Northern Europe the present year. Our advices are down to about the middle of August. Both on account of the general interest which attaches to the march of this terrible scourge, and of the peculiar characteristics of the present epidemic, what we have collated will be read with interest.

To go back to the Fall of 1871, the epidemic, after appearing with great severity in several of the littoral provinces of the Baltic, and having invaded Berlin in a few isolated cases, became almost extinguished, apparently by the increasing cold. The last place to which it clung was Revel, a seaport at the entrance of the Gulf of Finland. Here, scattered cases occurred in January and February, but none were reported after the latter month.

In a similar manner, the more southern district of Gallicia, which was afflicted late in the autumn, and quite severely in January, became by the month of March altogether exempt. Here, as elsewhere, rather more than than one-third of the cases, say 35 to 38 per cent., proved fatal.

Constantinople, as usual, suffered severely. In November (1871) the deaths numbered 400 weekly from the epidemic. It was disseminated throughout the whole city, and did not diminish until a cold spell in December arrested its ravages. The first case had occurred September 2; the last was reported January 11. Between these two dates, 7725 cases of cholera were reported, with the heavy mortality of 3515 deaths, nearly one-half. Many cases were certainly not reported, especially those which re-

covered, so that probably this death rate is more frightful in appearance than in reality.

This last spring, early in April, a number of cases reappeared near the frontiers of Gallicia, in Podolia; and in the following month at Chotin on the Dniester. Throughout the summer, reports prove a persistency of the disease in the valleys of the Dnieper and the Dniester, slowly working its way westward along those streams. Its reappearance has also been noted at Kiew, next at Ekaterinoslaw, at Kherson, and in June at Odessa. This is the *fourth consecutive summer* in which the disease has broken out in these cities, presenting an appearance as if it was no longer epidemic merely, but endemic as well, as it is in India.

In July, it commenced anew along the Baltic, most of the southern and southwestern provinces of Russia being at that time affected by it. On the 18th of July 51 persons were attacked in St. Petersburg; 32 recovered, and 10 deaths; on the 20th 54 deaths. The cases continued to increase; 280 were under treatment, August 8, up to which date the total number was 1931, of whom 900 had died, and 751 recovered.

Less severe, from all accounts, has been the disease in Moscow, but we have not the official reports to quote.

On July 27th, three cases were reported in Berlin, in a house on the most fashionable street, the famous *Unter der Linden*. So far its progress seems to have been checked there.

In Constantinople, it has broken out with quite as much virulence as last year, and most of the ports on the Black Sea have suffered from it more or less. In India, we are informed, it is raging with unusual violence.

This general and imperfect sketch, nevertheless, presents some striking features of the epidemic. While the mortality is just as great as in any previous epidemic, it is incontestable that in two very important respects there is a modification of its virulence. 1. The disease does not travel so rapidly as it has in previous incursions. 2. It is not so readily communicated in a given locality. The latter fact was abundantly demonstrated in Constantinople. Its facility of propagation was far more marked in 1865. And the fact that, in spite of the constant and large communication going on between the Black Sea and Central Europe, the disease is practically yet unknown in the latter region, clearly substantiates the former. To balance these mitigating circumstances we must add that it looks probable that it is domiciled in Eastern Europe, about Kiew, which region, probably for many years to come, will be a focus for its production.

Notes and Comments.

Poisoning by Privet.

Dr. J. D. Moore says, in the *British Medical Journal*:—

The common privet of our gardens (*Ligustrum vulgare*) has long been considered as a vegetable poison, and a few instances are upon record in which children have died from eating the berries of the plant; but the occurrence of poisoning by the leaves or young shoots of the plant has never as yet been recorded. During the last few weeks, in the month of April, two cases of this character have been under my care, of which the following are the principal symptoms.

The father of a child aged about nine years requested me to see his little boy, whom he described as being feverish and drowsy. The child seemed to lose himself; did not answer questions put to him without much persuasion, and then evidently with great difficulty. On going to bed, the child tried to say his prayers, but after the first sentence or two, stopped short, as if he were drowsy or had forgotten them, and on being roused commenced again, but with the same result. The father then noticed some twitching of the hands and arms, and deemed it necessary to have immediate medical advice.

When I saw the patient first, he was in bed; he had been much purged, the evacuations being of a greenish color; he was semicomatose, seemed to be quite unable to speak, and was with difficulty made to understand that he was required to put out his tongue. The temperature of the head and body was

above the normal, and in a short time there was a cold perspiration. There were convulsive movements, at first noticed particularly on the right side; the hands were clenched and the feet drawn up; the pulse quick and small, and respiration somewhat hurried. There was some tenderness of the abdomen upon pressure. These symptoms increased in severity during several hours, and the purging continued, accompanied with severe vomiting, the vomited matter evidently containing small particles of green leaves, the fragments being too small to afford any idea of the plant from which they had been taken. The convulsions became more general and severe; the head was frequently thrown back during the convulsions, in a condition somewhat resembling slight opisthotonos.

A second child, about six years of age, was seized with purging in the course of a few hours, and presented similar symptoms in every respect. Both of them recovered slowly from the effects of the toxic agent. There was for some time much loss of power, especially of the lower extremities; one of the children, on attempting to walk, making use of the expression "that his legs would not do as he wanted them." On their complete recovery, the elder child went with me into the garden, and pointed out the plant from which he said they had plucked and eaten the leaves and young shoots, thus clearly identifying the poison as being that of the common privet.

The Uses of Wine.

At the late meeting of the American Association for the Advancement of Science, some remarks were made on this topic by Professor SWALLOW. He began by stating that he was an original Maine Law man. He wished to state a few facts, and if they were disputed, he would gladly debate them. It seems to be a well settled principle that man will have a stimulant. Tea, coffee, cocoa, wines, whiskies, rums, and gins, have been extensively used throughout the earth. The Professor admitted all that had been stated about the evils of strong drink. Can science do anything to eradicate this great evil? If man's taste for alcoholic drinks is so strong that it cannot be resisted, cannot science interfere? I think it can, and I propose good grape wine as the remedy. Give us what good wine we need, and the temperance crusade will be well-nigh ended. Grape wine does not produce that hankering for more stimulus which is the case with stronger drinks and narcotic drugs. We must have a wine so pure that physicians can safely recommend it. At the Baltimore meeting, I showed that Missouri offers better opportunities for grape culture than all France. The central and southern portions of this country can produce more good wine than all the continent can drink. Wine is a better stimulant for Americans than coffee or tea; better suited to their wiry, bilious, nervous constitutions.

Our sparkling wines are as good as those we import, and there can be no question but that sound wines are wholesome. He then entered into the details of wine making.

Actions for Libel.

Two well-known European medical journals have lately sustained actions for libel from medical men. The first was Maunder *vs.* Wakley. This was an action brought by the plaintiff, who is a surgeon attached to the London Hospital, against the defendant, who is the proprietor of the *Lancet*, for a libel published in that journal. The article complained of, commented on certain matters with which Mr. MAUNDER was connected, and some very offensive expressions, such as "spy" and "informer," had been made use of. The Messrs. WAKLEY considered that they were merely discussing a public question; but stated that in the remarks that appeared in their journal they had no intention in the slightest degree to cast any imputation upon the professional character or the private honor of the plaintiff, and that if any offensive terms were made use of they did not and were not intended to apply to the plaintiff, and they withdrew all such imputations in the fullest possible manner. A nominal verdict for the plaintiff, with 40*s.* damages, was then recorded.

The scene of the other action was in Vienna, against the *Gazette Medicale* of that city, the complainant being Professor BILLROTH. This eminent gentleman has recently had a patient die under chloroform, while under his treatment. The editor of the *Gazette* takes the opportunity thus afforded of reviewing former unsuccessful operations of the same celebrated surgeon, among which are enumerated an exactly similar case, under corresponding circumstances; another chloroform death during his examination of a wounded finger; that,

on another occasion, he tied the lingual vein instead of the artery; perforated the bladder in a lithotomy operation, etc. The journal remarks, that if such errors occurred in the case of a provincial practitioner, imprisonment would be the result. Professor BILLROTH has instituted an action for libel, in order to vindicate his professional character.

Syrup of the Lacto-Phosphate of Lime.

For this the *Chemist and Druggist* gives this formula:—

R. Concentrated lactic acid,	fℨj.
Magma of freshly precipitated phosphate of lime, as much as will dissolve.	
Orange flower water,	fℨj½.
Water up to	fℨ8.
White sugar,	ℨ11.

Mix the lactic acid with two ounces of water, and saturate it with the magma. Put the liquid upon a filter, and add the rest of the water until eight fluid ounces of filtrate are obtained. Pour this upon the sugar contained in a bottle; shake occasionally, until solution is effected, and strain. No heat ought to be applied, else the syrup assumes a milky appearance. The syrup thus prepared contains between two and three grains of dry phosphate of lime in each fluid drachm, besides the lactic acid.

Dr. R. BLACKE calls attention, in *The Practitioner*, for February, 1872, to the use of the salt in adynamic fevers and in convalescence. The want of success which has generally attended the employment of the phosphates, he attributes to the fact that they are given in such quantities that there is not enough lactic acid in the gastric juice to dissolve them. He therefore recommends the administration of lacto-phosphate of lime, which he says is at once an aliment and an article of food, and a medicament of the highest value. It is, moreover, soluble in the secretions of the stomach, and is readily absorbable.

Sympathetic Vibrations.

Professor JOSEPH LOVERING, of Cambridge, Mass., at the American Association for the Advancement of Science, gave an interesting address on vibration, illustrated by an experiment. It was presumed that the members were more or less familiar with Milde's experiment with a tuning fork and vibrating thread. This optical method of Milde is very much improved by using a large bar of iron and perpetuating the motion by means of magnetic excitement, the vibration being thus maintained for any length of time. A cord twenty or thirty feet in length is thus thrown into vibration. When the first suspension bridge was building in England, a fiddler offered to fiddle it away. Striking one note after another, he eventually hit its vibrating note, or fundamental tone, and threw it into such extraordinary vibrations that the bridge builders had to beg him to desist. Only recently a bridge went down under the tread of infantry in France, who had not broken step, and 300 were drowned. An experiment is often referred to of a tumbler or a small glass vessel being broken by the repetition of some particular note by the human voice. It is said, and may be true, that certain German tavern keepers increase their custom by the occasional performance of this feat. In the Talmud there is a curious question raised as to what would be the damages if a domestic vessel were broken by a noise made by an animal, such as a barking dog.

Preservation of Bodies by Carbolic Acid.

Professor GUILLERY has demonstrated anew the powerful antiseptic properties of carbolic acid, in some recent experiments. He enveloped a fresh cadaver in a cloth saturated with a solution containing two per cent. of the acid, and after an interval of four or five days poured more of the solution over the body. By this treatment, putrefaction was entirely prevented, the body, after six months, presenting no signs of decomposition, and being but little altered in appearance. At the Morgue, in Paris, a solution containing one-twentieth of one per cent. of carbolic acid, sprinkled over the bodies, arrested putrefaction even during the heat of summer.

Arsenic in Lamp Shades.

A German doctor has described two cases in Jena, and one in Frankfort, where persons using green glazed paper shades were attacked with symptoms of arsenic poisoning. In no case did the symptoms cease until the use of the shade was discontinued. The heat of the lamp volatilizing the arsenic renders the small quantity present very dangerous.

The Shifts of Obstetricians.

The *Australian Medical Journal* for May states that on the 2d of March Mr. W. H. JACKSON, a medical practitioner, residing at Merino, in the western district, had occasion to perform craniotomy under somewhat exceptional circumstances. Not having the ordinary instruments with him, he used a gimlet, an auger, a chisel, and a hook of telegraph wire. The woman did well.

This is equaled by the devices of Dr. NELSON, of Sacramento. This representative country physician manufactured, in 1852, on the spur of the occasion, with the assistance of an ordinary blacksmith, out of a common iron hoop and a steel ramrod, substitutes that performed their office equally as well, if not better, than the best finished and polished instruments of the metropolitan surgeon. They were a vectis, a blunt and a sharp hook. With these he performed craniotomy and saved the life of his patient. They are now preserved in the museum of one of our colleges in this city.

Singular Cause of Hemorrhage from the Bowels.

A rare and important case is reported in the *Bulletin de Therapeutique*, June 30, which throws light on some hitherto inexplicable cases of sudden death from intestinal hemorrhage. A man, 74 years of age, had enjoyed general good health, except a tendency to constipation. One night he was suddenly seized with intestinal hemorrhage and died in a few hours. Only twice, and that about a month before, had he had slight attacks of a similar character.

A careful autopsy disclosed the only lesion to be *erectile tumor*, the size of an almond, in the mucous coat of the duodenum. It was composed merely of an enlargement of the capillary vessels of the part, or so-called angioma. A slight ulceration at its edge had given rise to the hemorrhage which destroyed life.

Ingrowing Toe-Nail.

Dr. FINCH writes to the *British Medical Journal*:—

Neither of the cutting operations is at all necessary for the complete and rapid cure of ingrowing toe-nail. If a small, thin, flat piece of silver plate be bent at one edge into a slight deep groove, and, after the toe has been poulticed twenty-four hours, slipped beneath the edge of the nail, so as to protect the flesh from its pressure, and the rest of the thin plate bent round the side and front of the toe, being kept in position with a small portion of resin plaster passed round the toe, a speedy and almost painless cure will take place; and the patient, after the first day, has the additional advantage of being able to walk. I have followed this method in numerous cases with uniform success.

The Latest Cure for Cholera.

We notice in the *Allgemeine Medicinische Central-Zeitung*, August 14, the latest cure for cholera. It appears that the President of the Belgian Academy of Medicine has received a communication from Taurus, relating that the Persian physicians have been using with signal success, in the present cholera epidemic, a drink called *Ghiacourt*, made of milk curdled with rennet. This is mixed with water and ice, and given in small quantities repeatedly.

The juice of unripe grapes mixed with ice has also, it is said, been used with good results, though this latter, to our mind, would be more likely to produce than to cure the cholera.

Medical Mottoes.

The Royal College of Physicians takes its motto from Hippocrates, '*Ο βιος βραχυς ἡ δε τέχνη μάκρη*—"Life is short, and art is long." The Royal College of Surgeons takes, *Quæ prosunt omnibus artes*—"Arts that serve all men;" the Society of Apothecaries makes Apollo's boast its own: *Opiferque per orbem dicor*—"Over all the world I am called the help-bearer." The Pharmaceutical Society has the motto, *Habenda ratio valetudinis*—"Regard must be had to the state of health."

Cure for Sleep-walking.

This troublesome habit oftentimes resists all the common-place plans to break it up. When such is the case, Dr. PELIZZO (in the *Abeille Medicale*) recommends the use of bromide of potassium. We tried it in the case of a girl who would get up in her sleep, walk about her room, eat, etc. About 30 grains daily (morning and evening) effectually cured. It is also of good service in the agitated and restless sleep of young children.

New Treatment of Pneumonia.

In a German medical contemporary, the Wurtemberg *Med. Correspondenz Blatt*, Dr. BAUER, of Gmund, praises highly a novel and bold treatment of pneumonia. He immerses his patients two or three times a day, for five minutes, in a bath of 60° Fah., and gives hourly small doses, about half an ounce, of wine, champagne or Hungarian still wine. His success was excellent; out of twenty-six cases he lost one, and that an aged woman. Some were very severe, both lungs involved. Convalescence was unusually rapid. No other treatment was employed.

To Prevent Stains from Tincture of Iodine.

It is stated that a few drops of carbolic acid added to an ounce of tincture of iodine will prevent the unsightly stains left by the latter. The effect of the iodine is not impaired.

News and Miscellany.

The Schoeppe Trial.

The trial of Dr. Schoeppe for the alleged murder of Miss Steinecke commenced at Carlisle, Pa., the last of August. Our readers are aware that this case has occupied considerable attention during the last two years, owing to the alleged deficiency in the *post-mortem* examinations. Its course, in brief, has been as follows:—

Aug. 31.—Professor Wood, of Philadelphia, testified that he did not believe Miss Steinecke died from poison, but from kidney disease. Professor Aiken, of Maryland University, affirmed his previous testimony as to the presence of prussic acid in the stomach of deceased.

Sept. 2.—The whole time up to the adjournment of the Court was occupied by the examination of Dr. Aiken.

Sept. 3.—The time was occupied with hypothetical cases. The prosecution closed, and the defence will open to-day.

Sept. 4.—The will produced by Schoeppe after Miss Steinecke's death, giving him all her property, was presented in evidence. Dr. S. B. Kieffer, of Carlisle, testified at length, contradicting Dr. Wood's testimony. The Commonwealth closed.

Sept. 5.—The case was opened for the defence. Dr. John J. Reese testified his opinion that the analysis of Professor Aiken was utterly unreliable. Dr. E. Lloyd Howard, Professor of Anatomy in the Baltimore College of Dental Surgery, thought the post-mortem examination of Miss Steinecke unsuccessful, and that it would be impossible now to say of what she died.

Sept. 6.—Professors Genth, Wormley and Hines testified for the defence, and the evidence on both sides closed. The Chief Judge, after remarking that the moral evidence was very feeble, and that he believed "it was God's Providence alone which saved the Court and a former jury from committing a great wrong," said that he would "deliver a formal charge at 9 A. M. to-morrow." He then adjourned the Court. Schoeppe was virtually acquitted, and only the formal announcement remained to be made.

Personal.

Professor Stober, of Strasburg, well known as an expert oculist, is deceased.

Professor Dr. Gerhardt, of Jena, has accepted the chair of pathology and therapeutics in Wurzburg.

Professor Gross, of this city, and family, and Professor D. Hayes Agnew, have returned from Europe.

The Countess Hélène Voryl de Swiderska was in London quite recently *en route* from New York to St. Petersburg. This is not simply a piece of court news, for this lady is something more than a Countess. She has recently graduated with honor from the New York College of Dental Surgery, and enjoys the distinction of being the first of her sex entitled to affix the professional D. D. S. to her name.

Professor Nelaton is said to be beguiling his time in translating the Odyssey. He is afflicted with an incurable disease, an internal tumor.

Dr. A. V. Marshall, of West Cornwall, is about to retire from the medical profession for the purpose of devoting himself to the ministry in the Methodist church.

Dr. Roderick Byington, father of Rev. T. L. Byington, of Newton, died at his residence in Belvidere, on Sunday last, aged about 80 years. Dr. B. was one of the oldest and most esteemed physicians in this State.

Patents Issued.

List of Medical and Surgical Patents issued from the United States Patent Office to Inventors, for the week ending August 13, 1872, and each bearing that date. Furnished this paper by Cox & Cox, Solicitors of Patents, Washington, D. C.:—

Medical Compound—John M. Gray, Riceville, Pa.

Medical Compound for Treatment of Diseases of the Lungs—Wm. A. Smith, Concord, N. C.

Manufacture of Bitartrate of Potassa—G. Bourgade, Jersey City, N. J.

Medical Compound, or Bitters—G. W. Brown, Portland, Oregon.

Manufacture of Sulphuric Acid—David Jackson, Walworth, England.

Medical Compound for Rheumatism, etc.—T. B. Hick, New Haven, Ill.

Medical Compound for Dyspepsia, etc.—D. Mayon and E. Champlain, Cloverdale, Cal.

Dentists' Chair—A. W. Morrison, Saint Louis, Mo.

Narrow Streets.

The English journals, criticising American cities, say that New York ought to have narrower streets, with higher houses, as a protection against the excessive heat of the sun. The Washington *Star* considering these remarks as a slur upon that city of "magnificent distances," asserts that Washington, with the thermometer up among the nineties, has very few cases of sunstroke, and as a reason for this exemption gives the fact that the wide streets are open to every breeze that blows. Boston, with its narrow streets, it is asserted, is uncomfortably hot on some days in summer, and in New York, it is contended, the streets are too narrow and the houses are too high, so that columns of heated air are enclosed therein, which no breeze from the ocean can dissipate.

The American Association for the Advancement of Science.

This Association commenced its twenty-first annual meeting at Dubuque, Iowa, on Wednesday, August 21st, at 10 o'clock A. M. On the evening of the same day a formal reception was extended to the members by United States Senator Wm. B. Allison, of the Reception Committee.

Hint for Sea Bathers.

At Trouville, one of the most fashionable of French seaside resorts, it is usual to provide warm foot-baths for the bathers when they leave the water. This is said to prevent the headache, from which many persons suffer after bathing in the sea.

Dr. SIGERSON, an eminent European savant, has found in the air exhaled from the lungs of tea-drinkers a large number of microscopic globules of a poisonous narcotic oil, which explains, he says, why tea makes nervous people coughy. He might have added, according to another high authority, consumptive, for it is claimed that weak people who indulge regularly in this beverage ultimately weaken their lungs, be they ever so strong at first.

DR. A. W. SHEPHERD has been reappointed County Physician of Kings county, New York, for the term of three years.

CINCINNATI is the healthiest of all the large cities.

MARRIAGES.

HAYLETT—BULKLEY.—In Moretown, August 4, by Rev. J. H. Babbitt, of Waitsfield, James Haylett, M. D., and Clara, daughter of George Bulkley, Esq., both of Moretown.

SHRIVER—ROGERS.—August 8th, by Rev. R. R. Moore, at the residence of the bride's parents, Dr. C. Shriver, of Bethany, West Virginia, and Miss Rebecca E., daughter of William Rogers, Esq., of Brooke county, West Virginia.

DEATHS.

BARTRAM.—In Philadelphia, on the 31st ult., Amie Griffiths, daughter of Dr. Thomas S. and Mary A. Bartram, aged 2 years and 22 days.

CRAWFORD.—June 27, 1872, at Mid Prairie, Louisa county, Iowa, Mary Jane, wife of Dr. James Crawford, in the 56th year of her age.

DOW.—At Galesburg, Illinois, July 25th, 1872, Willie Blaine, only son of Dr. S. A. and Kate B. Dow, aged 3 months and 16 days.

FOSTER.—On Saturday evening, August 10, of heart disease, John Moorhead Foster, eldest son of Dr. N. and Josephine L. Foster, in the 14th year of his age.

GREGORY.—At Norwalk, Connecticut, Monday, September 2, Dr. Ira Gregory, aged 68 years.

HALLOCK.—At Orange, N. J., Horace Warren Hallock, son of Dr. Lewis and Emily L. Hallock, of Philadelphia, aged 21 years and 3 months.

KITTREDGE.—At Glastonbury, Connecticut, Aug. 22, at the residence of her brother, Rev. J. E. Kittredge, Miss Sarah F. Kittredge, daughter of Josiah Kittredge, M. D., late of Montclair, N. J.

LAMB.—In Waterbury, Vermont, August 15th, Ervine E., only child of Dr. M. D. and Mrs. E. I. Lamb, aged 4 months.

LOCKE.—On August 20th, at the residence of his mother, on College Hill, Cincinnati, Ohio, from rupture of a blood-vessel of the lungs, John Locke, M. D., in the 46th year of his age.

PALMER.—In Ludlow, Vermont, August 9th, Henry H. Palmer, M. D., aged 53 years and 7 days.

RUMSEY.—On the 1st inst., at Wethersfield Springs, N. Y., J. Caverly Rumsey, aged 23, son of Dr. J. S. Rumsey, of Fishkill, on Hudson, N. Y.

SHELDON.—In Dorset, Vermont, July 10th, Dr. Henry Sheldon, for thirty years a practicing physician at Rupert, and formerly a member of the State Senate.

SMITH.—At his residence, in Enon Valley, Pa., July 5th, Dr. William Smith, aged about 60 years.

SMITH.—At Mauch Chunk, Pa., on July 31st, Elizabeth Dana, wife of Dr. A. C. Smith, in the 44th year of her age.

STAFFORD.—On the 17th of August, in Philadelphia, Dr. Joseph B. Stafford, in the 68th year of his age, formerly of Allentown, New Jersey.

OBITUARY.

WISTAR.—Died, on the 15th of August, 1872, Dr. Mifflin Wistar, in the 62d year of his age.

The announcement of the death of this excellent man will be received with deep emotion and regret by a large circle of relatives and friends, who will find it difficult to realize that one so greatly esteemed and respected is no longer among them. Dr. Wistar was remarkable for the conscientious and scrupulous performance of every duty. Self-denial, consideration, delicacy, and refinement, were prominent traits in a character conspicuous for its many attractive qualities; and few among men have entered upon their eternal existence leaving behind them a more blameless and consistent record. The son of the late eminent Professor Wistar, he preserved unsullied the name which he inherited, and though he also might have achieved high distinction in a profession which he studied but never practiced, found, in the privacy of domestic life, a more congenial sphere for the exercise of his talents and the indulgence of his sensitive, peace-loving, humble temperament. He was kind, generous, thoughtful for others, and unselfish in the highest degree; with a heart touched by human woe, and a hand ever liberally open for its relief, he was unwearied in every good word and deed; and after a life thus devoted to the illustration of every Christian virtue, has gone to the grave followed by the love, admiration, and sorrow of all good men. L.

THE

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Original Department.

Communications.

THE INFLUENCE OF THE MENTAL OVER MAN'S PHYSICAL FORCES.

By A. B. Jones, M. D.,
Of Portsmouth, Ohio.

Read before the Ohio State Medical Society, June 14th, 1872.

(*Reported by Dr. J. W. Hadlock.*)

We prick the finger with a needle, and instantaneously a nerve of sensation gives us an intelligent idea of violence. By the aid of the scalpel and microscope we are enabled to follow up the nerve fibre to its starting point. No sooner has the sensation reached what we are taught to call the seat of the mind, the brain, than another set of nerve fibres spring into action, and at once withdraw the finger from further injury. These nerves of sensation and motion are simply prolongations of the medullary substance of the brain, spinal cord and semilunar ganglions, which find their way to every part of the body. Had no other office been assigned to the brain than the control of these forces alone, it would have a duty of highest importance to perform. But we have an office assigned it infinitely higher than that of sensation or motion. The brain is the workshop of man's mental forces; this we will neither assume nor deny, holding either position beyond demonstration, but simply ask, where are the nerves of thought? Are they wrapped up in the gray or white substance of the brain, to grow and strengthen, as Prof. Agassiz advises us, by eating fish? or as Mark Twain pertinently suggests, a whale? Or are they lying loose in the front and large portion of the brain, the one-fourth of which I have seen a boy lose, from a fracture caused by a gunshot wound, without affecting his mind? But the object of this paper is not so much to hunt up the exact location of man's mental forces, as to show their influence upon physical organs, the exact location of which we do understand, together with their functions. That a man may enjoy good physical health with a very feeble intellect is a fact so well established that but few will controvert it. But the converse will not hold good; the immortal part of man, that which was made in the likeness and image of the Infinite, is dependent for its proper, full and vigorous development upon the healthy and well-developed condition of all the physical organs.

A man is no more capable of reasoning correctly who is in confirmed hypochondria, which we have been taught to believe has its origin often in the derangements of digestion, than he would be with softening of the brain, or, if you please, with a tumor on the brain. Yet the mind, so to speak, may dwarf the man physically to such an extent as to cut off its own supply; and it is this, as guardians of the health and preservation of our race, that we are daily called upon to consider, and, it may be, to correct. The influence of the mind is more frequently, and, perhaps, more directly, felt upon the stomach than any other organ. Who of us has not sat down to dinner with a keen relish for the good things set before us, when some sudden news, depressing, perhaps, in its character, has in a moment induced satiety. Intense grief or fear is

said to have changed the color of the hair in a single night from black to white. An over anxious feeling, coupled with hope and doubt, is very apt to increase the secretion of the kidneys. Prurient thoughts will increase the secretion of semen; the cry of a young child will start the lacteal flow in the mother; the fear and dread of a cancer have, without much doubt, converted a simple fibrinous tumor of the breast into a malignant one; putrid or disgusting objects may produce emesis; and there is but little doubt but that the mental emotions may be so operated upon as to cause an attack of diarrhœa. And so we might go on until we had enumerated nearly all of the secreting organs of the body. Men in good health meet with some little reverse in their business, they grow anxious about it, lose sleep and appetite, then they worry because they cannot either eat or sleep, until they become sick. The physician is told everything but the truth, when he proceeds to worry them additionally with drugs. When death supervenes, they die of "softening of the brain," a very convenient disease for men to die of; the skull is so thick that you cannot conveniently feel the brain through it; and then if an autopsy is made, why, the brain is always sure to be soft, which proves eminently satisfactory to the friends.

A sick person grasps the thoughts of a physician the moment he enters the chamber, and he holds them as if they were things tangible, just as he does the out stretched hand, only he holds them long after the doctor has gone on his weary way. Hence the quiet, cool, easy, cheerful, graceful, self-possessed, confident doctor is always the successful practitioner. A physician once wished to compliment a lady who had brought a floral tribute to one of his sick patients, and while looking upon the beautiful bouquet of flowers close to the blanched cheek, he politely remarked that he once knew life and death poised in the balance, and the delicate odor of the citron turned the scale in favor of life. While this may not be literally true, it is not without its effect, and it is as much the duty of a physician to look after and control that spirit essence, or subtle essence, the mind, as it is to know that the stomach has been relieved of its noxious bile, or that the fevered pulse now keeps pace with his own. The finest medical lecture ever given, at least in so short a compass, was by Solomon; it is this, "A merry heart doeth good like a medicine, but sorrow is as rottenness in the bones."

It is a common saying that you must have faith in a doctor, or his medicine will not cure you. Now confidence and trust in a physician's skill is, no doubt, oftentimes fraught with good results. The solution of this is that the mind is relieved, in a measure, of its anxiety, ceases to concentrate itself upon the diseased organ; but this is not so much a cure by faith, as it is a cure by mental over physical force. It is not only that one's own physical organs are influenced by mental force, or mesmeric force, but that through the latter, or nerve force, one's mind exercises a material influence over another's physical organs. This pertinently suggests the necessity of a thorough study and knowledge of human nature, by the well-educated physician. It is not unfrequently the case that we find physicians eminently qualified to practice their profession who are very unsuccessful in their practice. Why is this? It is certainly not because their diagnosis has been faulty, neither is it because improper medicines have been used; but it is because the mind of the patient in stretching forth its delicate tendrils—may be bruised ones—found nothing to refresh and strengthen them. Simply because the souls of the physician and patient, or their minds, did not seek to get acquainted with each other. This certainly is the chief cause of their failure, and tells us very plainly that our minds, our souls, our thoughts, must be administered, as well as our drops and pills, if we would successfully combat disease.

We occasionally meet persons with imaginary diseases—imaginary in the beginning, but real in the ending. Again, there are some persons who have had real disease, been thoroughly cured, and yet their minds, so to speak, remain so full of the disease that they cannot be made to believe they are well, and a depressing influence is thus brought to bear upon their general health, closely allied, if not akin, to the trouble they have been cured of. Now, blister, plaster and quinine will not relieve this class of patients; they can only be cured by administering to what we have been taught to call a diseased mind an equal amount of healthy mind. How is it to be done? Well, there comes the rub; it is enough for my present purpose to say it must be done. Association occasionally develops disease. For instance, chorea. A boarding-school miss gets sick,

recovers in a degree, but there remains with her an involuntary motion of some of her limbs, beyond her control. This occasionally extends through an entire class, almost as much so as rubeola or pertussis would. This, of course, I do not class as a disease of the mind, but rather as one that may be caused by acting through the mind. One other class of patients, and I am done. A patient comes to you, a highly intelligent gentleman, a lawyer perhaps, may be a divine; he has read a great deal, he has thought a great deal, and no doubt but he knows a great deal in his line. He holds in his hand an advertisement, which he has cut from a newspaper, of some patent medicine man, or it may be a leaf out of Jayne's almanac; possibly some disciple of Hahnemann has sugared him up by his description of the aches and ills that flesh is heir to. Now, he wishes you to distinctly understand that he does not believe in patent medicines, and as for those little pills, he thinks nothing could be more insignificant, unless, perhaps, it might be the knave or ass who peddles them. "But then," continues he, "they have described my feelings better than I could do it myself, and it may be possible that this is just what I need." You examine the case carefully, and find instead of his needing a "Liver Invigorator," "Lung Balsam," "Blood Purifier," or "Catarrh Snuff," that he has simply overtaxed himself, both mentally and physically, until he can easily imagine aches he does not feel. But there is still another, and perhaps better reason; it is this: nearly every patent medicine man describes about the same class of symptoms, in about the same words, no difference what the disease he is describing. This is not noticed by the general reader. It requires only a little careful wording, with a moderate degree of ingenuity, to tell a man about how he feels, for there is scarcely any sick man who feels well. A little address may be well in the beginning; for instance, preface your remarks with, "You know from your own personal observation that he is a man who will not give up to trifles; that he has a general feeling of languor and debility all over; an occasional chilliness, followed with more or less fever, flashes of heat, a general aching all over, an occasional palpitation of the heart, a little nervous, will start suddenly if frightened, irregular appetite, cannot sleep well, a little running round of the head if he stoops down and rises up suddenly; after eating a hearty meal he gets up from the table feeling full." Now, this will satisfy nine men out of ten. Of course, I need not here remark that this is all absurd, but nevertheless it is kindred stuff, through patent medicine advertising, that causes a great deal of the diseases of both the mind and body that we are called upon to treat, and I merely refer to it to illustrate the action of the forces of which this paper is the subject.

A CASE OF LITHOTOMY.

By Wm. Faulkner, M. D.,
Of Erie, Pa.

On the 17th of November, 1871, I was called into Crawford county to examine the case of Mr. J. W. M., æt. something above 70. He was a large-framed man, full six feet in height, considerably emaciated, and wore an expression of protracted and severe suffering. The following is the history he gave me of his case:—

"Twenty years ago I first experienced symptoms of disease about my bladder, which have increased from year to year, and have given me considerable trouble at times, without materially disturbing my general health, until within the last eight or ten years, since which I have found my health giving way under the influence of the disease and the pain I have suffered; have been losing weight and strength; have suffered from deranged digestion and want of rest and sleep. Have had frequent painful attacks in which it was impossible for me to urinate, and it has been very difficult and painful to have the catheter used at such times, and (as his physician informed me) required an instrument of more than ordinary length. For some years now I have had, more or less constantly, a painful desire to urinate, and it has only afforded me momentary relief to pass my water; in twenty or thirty minutes the desire would become painful again, and for the last two years I have not at any time been able to void one drop of water by a voluntary effort. I have learned to use the catheter myself, and it has been my only relief; night and day I have been obliged to use it to get a few moments' ease from this distressing desire to make water. Within the last two years I have been much afflicted with the very offensive odor of the urine; it looks badly, and throws down a very singular deposit, and, as you see, my general health

is very poor. I get no rest, no sleep, my appetite is gone, my bowels are constipated, and I am much troubled with the piles; this is much aggravated by an ungovernable desire I have to strain and force away the water when I introduce the catheter; if I had the dysentery this feeling could not be more urgent and uncontrolable. Now, Dr., I have always considered my case beyond the reach of physicians, and I have only consented to send for you at the suggestion of Dr. Gray, and now I want you to tell me what you can about it."

Upon inspecting the urine I found it extremely offensive, with a deposit of mucus, pus, and blood; and upon using the sound I readily detected a calculus, without being able to estimate its size, from the fact that the instrument was firmly held by the urethra, with very little latitude of motion, in consequence (as I inferred) of enlargement of the prostate. I gave him a combination, in form of syrup, of rhubarb, uva ursi, and bicarbonate of soda, and sulphate of morphia, gr. ½, three times per day, and suitably regulated his diet. In ten days or two weeks he wrote me that he was much more comfortable; he rested better at night, bowels were regulated, appetite better, and the irritability of the bladder considerably moderated; and on the 7th of December I operated on him by the lateral incision, in presence of Drs. Biechard, Wilson, Kibler, Blakeslee, Lovett, and my brother, M. L. Faulkner.

When he was placed in position I noticed his pelvis was very narrow, and upon making my incisions, found the perineum very deep, requiring a strong effort to force the finger as far as the membranous urethra, making it a matter of some difficulty to open into the staff, and at no time during the operation could I more than touch the gland with the point of my finger. The calculus proved to be a friable phosphatic formation, and broke down with the first grasp of the forceps. After removing all fragments, and clearing the viscus of all foreign particles, the old gentleman was placed in bed, and stimulated until reaction became fully established, and he made a fair but slow recovery. The urine passed off freely through the cut, and from week to week lost much of its offensive odor. He was not long in realizing great relief from the operation, and expressed his appreciation of it in the most decided terms.

His system gave evidence of low vitality, the granulations were pale and of low sensibility and slow growth. He required supporting treatment, and the wound was kept carefully cleansed and stimulated with carbolic acid.

After the first month the catheter was used at regular intervals, that the escape of urine through the cut might not interfere with the granulation.

In the latter part of February or first of March he began to go out among his neighbors, and some time in April, for the first time, he passed his urine by a voluntary effort. His urine had by this time become normal, his general condition good, and soon after he began to give attention to business. I regard this case as presenting some points of interest: First. For its history, covering a period of twenty years, gradually developing those symptoms peculiar to stone in the bladder. Second. Its complication with senile prostatic enlargement, with inability to urinate. Third. The very small space between the bowel and rami of the ischium and pubes. Fourth. The great depth of the perineum. Fifth. The friability of the calculus.

These conditions are sources of embarrassment in this operation which will be fully appreciated by surgeons who have had like cases. I might mention his restored power of urination as one of the interesting features of the case, which will be remembered was lost two years prior to the operation, and was, no doubt, due to the enlarged prostate, a pathological condition not very amenable to treatment as a rule.

His improved general condition is very satisfactory, he having recovered a greater degree of good health and capacity of enjoyment than was expected after becoming fully acquainted with his case.

DOUBLE HYDRO-SARCOCELE.

By E. Michener, M. D.,
Of Toughkenamon, Pa.

Read before the Oxford (Pa.) Medical Society.

Thirteenth of ninth month, 1868, was called to see the subject of the following history, William ——, a colored laboring man, some 60 years old, unmarried, quite temperate, and withal a devout Christian. I obtained the following narrative of the case:

For the last four or five years he has been suffering a gradual enlargement of the

testicles, without ever having experienced any pain, soreness, or other inconvenience therefrom, except mechanically, from their increased *size* and *weight*. He enjoyed good health, and performed his daily labor without suffering. But during the previous wheat harvest he was thrown from a wagon loaded with sheaves and received several injuries, the worst of which was a severe contusion of the left testis, which had been, from the first, much more enlarged than the other. From that date both testes enlarged more rapidly, and the injured one, especially, became extremely painful and tender to the touch. He was now obliged to maintain a recumbent position, but continued to suffer much pain.

A physician was called, who attended him for several weeks without apparently arresting the progress of the disease, as the pain and tumefaction were still on the increase. His efforts appear to have been directed to subdue the inflammation and promote absorption. When these failed he suggested emasculation as a prospective necessity.

In this condition of things, William says, "The Lord told me not to take any more of that doctor's medicine; but I did not mind him for some time. But he spoke louder the next time, and I had to mind him. I answered him, No, Lord, I never will take any more of his medicine."

I give the narrative as he has repeatedly told it, and as I feel assured that he confidently believes it did occur. He says "the voice was audible and distinct as any man could have spoken."

Present condition.—It is now more than two months since the injury occurred. His health is somewhat impaired by protracted suffering, otherwise it might be called good.

On examination I find the left testis enormously enlarged, measuring vertically five inches, and transversely three. On the lower anterior aspect there is some slight elasticity and fluctuation, above it is firm and resisting, nearly free from pain or tenderness. The left testis is still larger, seven inches long, by three and a half wide, firm and resisting throughout, very sensitive to pressure, and constantly painful. The surface of the testes is smooth, not nodulated, and the spermatic cords are not materially enlarged. The skin, though hot, is not anywhere adherent, or implicated in the tumefaction. Enlarged arteries may be felt beating strongly beneath the skin, and the superficial veins are considerably enlarged My diagnosis was *Sarcocele*, complicated on the right side with *Hydrocele*, and on the left with acute *Orchitis*, consequent on the contusion, and now becoming more chronic. But it was impossible to altogether *ignore* the danger of a *malignant* tendency.

After a deliberate consideration of the case, I decided to pursue the following course of treatment, subject to any subsequent indications which might arise.

1. Absolute rest, in a recumbent position.
2. Abstemious, cool diet.
3. Bladders of ice, or iced lead water to the scrotum.
4. Epsom, or Rochelle salts, daily, to gentle purging.
5. Tart. antim., in nauseating doses, every six hours.

This programme was faithfully carried out, with the assistance of a kind neighbor, *a good samaritan*.

In one week after I found him clear of pain; the testes had lost about *one-fourth* of their former dimensions; were much more soft and yielding to the touch, and evinced very little tenderness on pressure.

The same treatment was directed to be continued, and was enforced as far as he could be induced to submit. But as the *necessity* became less urgent, the treatment became more *irksome*, and had to be relaxed, though not abandoned.

The improvement continued with accelerated speed. In three weeks I found him walking out on his lot, free from discomfort. In another three weeks he husked and stored his corn crop, without suffering any inconvenience.

I saw him at the end of three months the left, the largest testicle, had very nearly gained its normal size and condition. The right one was now larger, on account of some remaining hydrocele, but did not occasion him any serious trouble.*

These, gentlemen, are the simple facts. It is for you to draw your own conclusions. The diagnosis, the treatment, the unlooked-for success, the special Providence which the patient assumes in the case, all claim your consideration, and are subject to your award. What will be your verdict?

* He continues to be a healthy, hard-working man, up to the present time; but I am not able to state the condition of the testes for some months past.

Editorial Department.

Periscope.

Abstract of Interesting Papers Read before the British Medical Association.

The British Medical Association met this year at Birmingham, August 6th-9th. We quote from the Journal of the Association, epitomes of the more interesting practical papers read before it.

The Treatment of Rheumatic Gout.

By Julius Althaus, M. D., M. R. C. P. —The author of the paper commenced with some remarks on the nature and pathology of rheumatic gout, which he likened to the atheromatous process in the internal tunic of the arteries occurring in old people, and which, he said, was one of those highly insidious and chronic inflammatory conditions characteristic of the period of involution and senile decay. After glancing at some results of recent microscopical research in the morbid anatomy of rheumatic gout, the usual treatment of this disease was criticised, and found to be open to improvement. The author had, for the last six years, sought and found opportunities to use the constant current in such cases, and had been well satisfied with the results. It could not cure rheumatic gout; it could not prevent the patients from advancing in age, nor check altogether the process of involution and senile decay to which the system must in the end succumb; but it did good in the following ways. 1. It acted as a general tonic to the system, and improved all the most important functions of the body, if applied in a peculiar manner, which was described in the paper. 2. It procured sleep, even in cases where opiates or chloral did not answer. 3. It relieved the pain. 4. If perseveringly applied, it reduced deformities. The author did not wish to imply that the use of internal remedies should be altogether eschewed in the treatment of this disease, as by thus acting we should only deprive ourselves of many chances to do good to our patients; but in the cases treated by him, he had given the first place to the constant current, and given medicines internally only for removing complications. He laid stress upon the necessity of persevering with the galvanic treatment for a considerable time, in order to do permanent good; and gave directions as to the way in which the treatment should be carried out.

Lactic Acid in Diabetes.

By Balthazar Foster, M. D. — Dr. Foster began by calling attention to the low temperature which he had observed in diabetes, and the bearing which this had on the respiratory theory of the disease. By means of diagrams, the daily excretion of sugar and water, the specific gravity of the urine, and the body-weight of each patient were represented graphically, under ordinary diet, animal diet, and under treatment by lactic acid. An analysis of the diagrams showed that under the acid treatment, the quantity of urinary water was notably diminished, and in a less degree the daily amount of sugar excreted. The specific gravity of the urine was less affected. The bodily temperature rose under the use of lactic acid, and the functions of the skin were restored. Dr. Foster also observed that the acid exercised a favorable influence on the lung-complications in some cases.

Cases of Diabetes Mellitus Treated with Lactic Acid.

By John W. Ogle, M. D. — Dr. Ogle described several cases of saccharine diabetes, in which he had, in addition to the use of a non-amylaceous diet, used lactic acid in considerable quantities. The details and results of some of these had been already mentioned in some of the weekly periodicals; and Dr. Ogle now brought before the Section the particulars of two cases which had recently been under his care at St. George's Hospital, and of which daily notes, with registration of amount of urine and its specific gravity, of the weight, and sometimes temperature, of the body, had been carefully noted. The two cases were admitted into hospital on the same day, one being a male aged 20, the other a female aged 28. In both cases meat, and non-amylaceous vegetables, with gluten, bread, etc., were given for several days, without the administration of any remedies. In the case of the woman, who was treated for eleven weeks before the lactic acid was given, the urine ranged in quantity between 112 and 178 ounces per diem; after the use of the acid the quantity quickly sank, and throughout its use fluctuated between 40 and 70 ounces daily, one day being as low as 30 ounces. During the whole of this time the specific gravity remained much the same as when the patient came to the hospital. In the case of the man, who was treated for seven weeks, under the lactic acid treatment, no marked diminution of urine, and no change in the specific gravity was observed; but after its long continued use, whether owing to it or not was doubtful, great constipation came on, requiring active aperients. As regarded the weight of the body, in both cases during treatment it fell; in the man from 8st. 5lbs. to 7st. 7lbs.; in the woman from 7st. 3lbs. to 6st. 8lbs. In the case of the man the temperature was chiefly *above* the normal, on one occasion only being below, and then it was 97.4— on

one occasion reaching 102.8. In the woman it was almost always *below* the normal, mostly being below 98. In both cases the morning and evening temperatures were often taken, but neither one nor the other was uniformly below or above the other. In both cases the lactic acid was increased until four drachms were taken in the day, and this was persisted in for several weeks. In neither case were any sting-like pains, rheumatic or other, complained of during the entire treatment, and in neither was any noticeable perspiration produced. In both cases the sweet and hay-like smell of the breath existed. In neither case was there any indication of interference with or affection of the nervous system; power of movement of the entire muscular system, and sensibility, both general and of particular organs, were entire throughout. The uvula, palate, and pupils were natural. In neither case was there albumen or uric acid in the urine; and in neither was there any decided lung-mischief manifest, though a degree of harshness of respiration was perceptible in the woman. Although in one case a decided diminution of the amount of urine, without increase of specific gravity, followed the use of the lactic acid, yet in both cases flesh and strength were lost, and Dr. Ogle did not think that these cases showed that any benefit arose from treatment.

RICORD ON SOFT CHANCRE.

A member asked M. Ricord if the soft chancre was capable of damaging the constitution.

M. RICORD, in acknowledging a vote of thanks, said that the soft chancre never gave rise to constitutional symptoms; but then it was not always easy to distinguish between the hard and the soft one. After a hard one, six weeks or two months, or, at all events, six months, would not pass away before secondary symptoms would appear. The hardness of the chancre was not always well characterized; it might be very superficial, something like parchment; and cases which had been sent to him as soft, were really hard chancres. But there was one thing which would distinguish the hard from the soft more than the relative degree of hardness of the base, and that consisted in the swelling of the glands which accompanied a hard chancre; here was never inflammation. The two groins were frequently affected after a hard chancre, but they did not suppurate; and there was this value attached to this distinguishing symptom of a hard from a soft chancre, that the swelled groin enlarged within the first fortnight. In the soft chancre there was no such chronic swelling of the glands in this time, and it did not come on without suppuration. Many had tried and failed to induce swelling arising from a hard chancre to suppurate.

An inflammatory bubo, with a soft chancre, followed sometimes six months afterwards; but in this case there would be no secondary symptoms. He could say to his patients who came to him with a well-developed hard chancre, "Within six months, you will, if treatment be not commenced, have something more." There was this peculiarity about a soft chancre that a man with one had no immunity from catching a hard chancre; and, from different sources, he might have both hard and soft at the same time, and he might see which he liked best. This was, however, a rare case; and the medical man could then foretell the patient that in one groin he would have a non-suppurating bubo, and in the other a suppurating one.

Mr. Lord asked M. Ricord to give his views with regard to the restrictions placed on the action of women in respect to stopping the disease from extending its ravages.

M. Ricord considered that the action of Government in this particular was without doubt a good thing, and would be better if other Governments concurred in the work; but as it was, English sailors brought the disease to the French ports, and so prevented the action of the French Government from being so effective as it would otherwise be.

DISLOCATION OF THE PATELLA.

By GEO. SOUTHAM, F. R. C. S., Manchester.—This accident occurred in a gentleman aged 22, in good health and with well-developed muscles, whilst wrestling with some companions in a first-class railway carriage. The patella was in a vertical position, the outer edge resting on the outer side of the external condyle of the femur, the inner forming a sharp projection at the front of the knee. The skin over it was so tense that the bone seemed as if it would force itself through the integuments if pressure were applied to it. The pain was most excruciating. Chloroform was administered, and the leg raised to relax the extensor muscles. Pressure on each side of the bone was then made, but its position could not be altered. The knee was now bent; and when the leg was at a right angle with the thigh, the bone suddenly slipped into its place. Mr. Southam believed the difficulty hitherto experienced in reducing this rare form of dislocation may be obviated by placing the patient well under the influence of chloroform before any manipulation is attempted; the pain which usually attends the injury forming a serious obstacle to reduction.

TREATMENT OF CANCER WITH GASTRIC JUICE.

By C. H. F. ROUTH, M. D., London.—After referring to former papers which he had read on cancer of the uterus, and the success which had attended some of these cases when treated by bromine, and referring also to some successful cases published by Dr. Wynn Williams, Dr. Routh proceeded to speak of the employment by Drs. Broadbent and Barclay of acetic, citric, and carbolic acid, which were supposed to act by causing a solution of cancerous cells. Dr. Routh then proceeded to speak of gas-

tric juice as a substance far more active than any of these acids. Instancing the two very remarkable cases cured by this agent by Messrs. Lusana and Pagello in Italy, the author proceeded to consider the mode in which remedies should act in cancer, as founded on physiological as well as pathological experience: 1. Selection by certain remedies of particular tissues. 2. Diminished vitality of diseased, as compared to healthy tissue. 3. Cessation of a new growth to increase, and its rapid disappearance, when circumstances favorable to its development were removed. 4. The absence of a central attractive growth, by its removal, prevented its reproduction. Dr. Routh detailed his mode of procedure in obtaining the gastric juice, which was a great difficulty. He expressed his preference for Morson's pepsine, as being that which he had more frequently used formerly, and that prepared by Messrs. Young and Postans, which he had chiefly used latterly. He then detailed the effects which he had observed produced by gastric juice on cancerous sores, specially those produced on a cancerous growth by the application of bromine previously: 1. Solution of sloughs. 2. Solution of the granular projections of the growths themselves. 3. The rapidity of its action. 4. Absorption and disappearance of glandular enlargements beyond the seat of growth. He then detailed the effects of gastric juice on the digestion of ordinary albuminous bodies even when diseased, and their conversion into nutritive peptones for the nutriment of the body, a process which justified the hope that, in some cases at least, the poisonous cancerous tissue might be so modified as even to become nutritive, and so arrest the cancerous cachexia. Dr. Routh spoke of Mr. Long's preparations of gastric juice in glycerine, and the preparation of Messrs. Young and Postans, without glycerine, instancing the remarkable influence which both preparations had in healing sores which had resisted often nearly every other remedy employed, as particularly encouraging. Two typical cases were given in illustration.

Mr. Spencer Wells (London), in opening a discussion on the paper of Dr. Routh, was of opinion that it *is* better practice to apply the caustic when practicable. Dr. Henry Bennet (London) said that thirty years' experience convinced him that the less that was done the better. Many cases were treated as cancer where cancer never existed. It was very doubtful whether the cases recorded were really cases of cancer. He found cancer of the body of the uterus very uncommon. Dr. Hickinbotham (Birmingham) asked Dr. Routh, if gastric juice were a cure for cancer, how was it that cancer of the stomach occurred? Dr. Steele (Liverpool) very much doubted whether Dr. Routh's grounds were well founded.

THE CHANGE OF LIFE.

By E. J. Tilt, M. D., London. The author reminded the Section how frequently medical men promised those suffering from protracted uterine inflammation that the change of life would effectually cure it, and bar its recurrence, whereas he was not afraid of asserting that this was a great mistake, and that one variety of uterine inflammation frequently occurred after the menopause, and remained undetected, because the patients, believing they could no longer suffer from uterine inflammation, generally bore their sufferings without seeking medical advice. The only kind of uterine inflammation that Dr. Tilt had frequently observed, after the menopause, was a more or less acute inflammation of the cervical mucous membrane, which generally brought on vaginitis; and he represented the symptoms as those well known. Although of a mitigated severity, the author had found such cases less amenable to treatment than at an earlier period of life, particularly when marked ulceration round the os uteri gave evidence of a similar state of the rest of the cervical mucous membrane. Dr. Tilt explained that when, at the menopause, the sexual organs were healthy, they gradually shrank by a process of physiological involution, and were ever after free from congestive and inflammatory liabilities; whereas, on the contrary, this physiological atrophy of the sexual organs might not occur for ten or fifteen years after the change, if the sexual organs were diseased, during which time women remained liable to uterine inflammation. The author stated: 1. That the occasional recurrence of that form of uterine inflammation which he had described might be safely predicted to all those who had been for years martyrs to chronic inflammation of the entire womb, whenever such patients presumed too much on their partly recovered strength after the change. 2. That inflammation of the cervical mucous membrane might be expected whenever the uterine tissues were being constantly teased by a small fibroid or polypus; when the cervix was hypertrophied or of a fibroid consistency; also in cachectic women, in whom one or more mucous membranes were always diseased. The author advised medical men to warn all such patients that they would not escape a mitigated form of uterine inflammation, if they did not take proper care of themselves after the menopause.

SECONDARY UTERINE HEMORRHAGE.

By John Bassett, Esq., Birmingham.—Mr. Bassett described thirteen cases of secondary uterine hemorrhage which had fallen under his observation in private and consultation practice. In all the cases the hemorrhage was severe, and in two it proved fatal. It varied in the time of its coming on, from the third to the thirty-second day after delivery. The cases were placed in three groups; in the first were five cases, in which the cause of the hemorrhage was irregular and inefficient contraction of the womb, with clots in the interior; in the second group were four cases where the hemorrhage

arose from the presence of a piece of placenta; the third group also contained four cases, in which the cause of the hemorrhage was a portion of retained membrane, a fibrous polypus, or inversion of the uterus; and in the last instance, as far as could be ascertained, the hemorrhage, which came on in the twenty-seventh day after delivery, was produced by imperfect involution.

REMOVAL OF INVERTED UTERUS BY LIGATURE.

By HENRY HORTON, M. R. C. S.—The case was of at least two years' standing. It had been thought to be and treated as polypus, but the ligature had not been applied. At each menstrual period the patient was almost drained to death, and for a very considerable time before removal there had been continual menorrhagia. To remove any doubt of the uterus being inverted, a most careful examination was made, both digital and by speculum. The abdominal parietes were so flaccid that the finger was easily pressed into the os in its inverted position, whilst two fingers of the left hand retained the fundus in a fixed position. There was not a single bad symptom after the application of the ligature, not even the slightest hernia; from which Mr. Horton concluded that there was (if one might use the term) union by the first intention, and that of sufficient strength to enable the obliterated os to bear the weight of intestine in a short time after the operation. The patient was able to walk, perform her household duties, and, in fact, to enjoy her existence in a way which she had given up all hope of ever doing again.

DISINFECTION OF AIR.

By A. ERNEST SANSOM, M. D., London.—In many of the infectious diseases (notably variola, scarlatina, rubeola, pertussis, pyæmia, erysipelas, and diphtheria) the patient is a centre from which the *materies morbi* is diffused, and the vehicle of transmission is frequently the atmosphere. The object of disinfection is the rendering inert of the *materies morbi*. We cannot rationally apply means intended to influence such *materies morbi*, without having a strong conviction as to its nature. Modern analytical research, especially the investigations of Chauveau and Sanderson, has shown that in certain infectious diseases the poison is a solid which can operate in no way as mere dead organic matter. Unless one assume it possessed of a hypothetic power of catalysis, one cannot explain its properties, and this term is gradually becoming improved off the face of science. In fact, it can be stated that no kind of catalytic change of organic bodies ever takes place without the intervention of living things or their active secretions. This paper assumed that the "poison" of infectious diseases which may be carried by the air consists of particles of living matter. Reviewing the agents for air-disinfection now employed, and the *rationale* of their action, the author considered that no non-volatile agent, such as permanganates and chlorides, can have any appreciable effect whatever; that oxidizers, *pure et simples*, are also inefficacious, chlorine having little if any action as a disinfectant. Iodine, however, is a valuable agent, and sulphurous acid and carbolic acid are very energetic air-disinfectants. The author detailed a series of experiments, showing, 1, that bacteria and monads are killed by air which contains carbolic acid; 2, that the germs in the air which develop into fungi are also killed by an atmosphere containing carbolic acid; 3, that, whilst the presence of sulphurous acid or of carbolic acid in the air prevents putrefaction, and the concurrent development of living forms, the so-called oxidizing disinfectants fail to prevent either. It is demonstrated that antiseptics existing even in small proportions only in the air, kill the low forms of life, and the probability is strong that, in like manner, they destroy the germs of disease. The author exhibited an apparatus made for him by Messrs. Savory and Moore, for the continuous supply of carbolic acid to the air of a sick chamber.

After some remarks by Dr. Alexander (Halifax) and Mr. Eyton Jones (Wrexham), Dr. Heslop (Birmingham) said he thought that inquiry must be directed to the power of hot water in destroying the germs of infectious diseases. About two years ago he recorded an inquiry as to the results of clothing from a scarlatina ward being mixed with the clothing of other wards in the hospital, the clothing of the former ward having first been subjected to hot water and chloride of lime. He was unable to say whether the clothes were submitted to boiling water, but they were placed in hot water, and chloride of lime was carefully employed. What was the result? They were so alarmed at the frequency with which scarlatina broke out in the other wards of the Children's Hospital, notwithstanding the most minute precautions were taken, that it was determined to make a thorough investigation. The first thing that occurred to them was that, instead of the whole of the clothes being washed together, the clothes from the scarlatina ward should be sent away to a woman who took in no other washing. After being so disturbed that it became a question with some whether the Children's Hospital should be kept open, that single circumstance completely prevented the diffusion of scarlatina to the other wards of the hospital. This was two years ago, and if a case of scarlatina had since occurred it had been engendered in the institution.

THE USE OF ARSENICAL COLORS.

By A. HILL, M. D.—Dr. Hill had had his attention called to this question during the last few months by a number of articles being submitted to him for analysis. Mineral green was an arsenite of copper, and was in great request on account of its brilliancy. It was this color of which ladies were fond for the artificial flowers which they wore. It was this color which was used for wall

papers, and which, in connection with gypsum, produced a large number of light and pleasing colors. It was made in enormous quantities; in England alone 700 tons were made in 1860. The men who made it were liable to be attacked by all the symptoms of arsenical poisoning, but this was rarely fatal. The speaker instanced the case of one man who suffered from arsenical poisoning from sleeping in a room hung with a paper of this color. It was warranted not to contain arsenic, but was brought to Dr. Hill for analysis, and proved to do so. The patient was put under treatment, and for many months the symptoms remained. At length he had almost recovered, when he met with an accident which proved fatal. The color was used by cooks and confectioners in ignorance of its deleterious properties, and by toy-makers for the purpose of coloring toys—a very dangerous practice, since the first place into which a child put a toy was generally its mouth. He had known of one case in which this dangerous material was employed to color the walls of the children's room in a hospital. The material was submitted to an analysis, and on its nature being discovered it was, of course, at once removed.

ON THE RELATIVE CONTAGIOUSNESS OF THE DIFFERENT FORMS OF SMALL-POX.

By W. S. Britton, Esq.—The author expressed his conviction that that form of small-pox known as modified, in which the pustules were conical, without any depression in the centre, was not of the same contagious character as the true form, with the depression. During the recent epidemic of small-pox, the writer held the appointment of surgeon to a large district in Marylebone, and had every opportunity of testing the correctness of his opinion, with the following results. 1. Every case of true small-pox was removed to the hospital generally on the second day of the eruption, where all the usual precautions were taken; but, in spite of this, within three weeks of the attack the disease, in 40 per cent. of the cases, appeared in some person who had previously been associated with the patient. 2. On the other hand, about fifty cases of modified small-pox (that characterized by conical pustules, without any depression) came under his notice. They were not taken into hospital, but were allowed, without restriction, to mix with the other members of their family, and in no one case did the disease appear in any person so exposed to its influence. He concluded, therefore, that modified small-pox was not contagious.

The Treatment of Thoracic Aneurism.

This is the subject of an essay lately published in London by Dr. George W. Balfour. He recommends *iodide of potassium*. In the cases related the dose of the iodide varied from five to thirty grains three or four times a day. In some of the cases unpleasant symptoms were at first produced, and the drug had to be discontinued for a time. Ultimately Dr. Balfour came to the conclusion that no advantage resulted from beginning with small doses, but that as it was desirable to saturate the system as rapidly as possible, it was, all things considered, better to begin with full doses, as of thirty grains, intermitting them occasionally for a day or two on the occurrence of any unpleasant symptom. He has found that thirty grains given once in the day will produce iodism, when the same dose, given three times, has no such effect; and he always now gives thirty grains three times a day, with a full opiate, or dose of chloral at bedtime, with the certainty of at once inducing tolerance; the iodide, he believes, counteracts both opium and chloral, which require to be given very freely; and finally he considers that it is only by keeping the patient persistently saturated with the drug for many months that permanent amendment is to be obtained.

"In regard to the adjuvant treatment, there are one or two remarks which seem to me of considerable importance, and these may be comprised under the two heads of position and diet. Whatever is capable of lessening the frequency of the heart's action, without impairing the strength of the patient, or vitiating the quality of his blood, cannot but be an unimportant adjuvant in the treatment of aneurism. The enforcement of the recumbent position, therefore, which is so influential in this respect, has seemed to me a matter of paramount necessity, and has been strictly carried out in almost all of my cases; indeed, in the most serious one (Case XXIII), the patient was laid upon his back for fully ten of the eleven months he was in my ward, not being permitted even to turn upon his side, any attempt to do so being always attended by a recurrence of his disagreeable symptoms. I have no doubt that the success attained in his case, as well as in others, was very considerably due to the long-continued perfect rest in the recumbent position; and in the treatment of so serious a disease as internal aneurism I should consider it most unwise to neglect the employment of this simple but efficient mode of aiding the cure. No doubt the enforcement of this portion of the treatment is irksome and impossible of attainment without the intelligent acquiescence of the patient, but I have not had any difficulty in obtaining this, on explaining my reasons, and the object I had in view; and I may make the same remark as to diet. Aware of the evils of starvation on the one hand, and of plethora on the other, my patients were at first put upon a somewhat restricted mixed diet, fish being given for dinner, at first at all events, as being the least nutritious form of animal food, while they were told voluntarily to restrain their appetite as much as possible, and to make use of no more than what they felt to be sufficient to maintain themselves. In regard to fluids, water, tea, or milk alone were allowed; and though

they were not doled out in a measured quantity, yet similar directions were given in regard to them as in regard to solid food; explanations were given in regard to the result desired, and the evils to be avoided, and careful inquiries were daily made as to the mode in which these advices were being complied with, so as to impress their necessity and importance upon the patients. I have had no reason to be dissatisfied with the result of this reciprocal confidence between patient and physician, and I believe it to be more conducive to the well-being and the comfort of the former, than any more precise definition of amounts by weights and measures."

Inversion of the Uterus.

A case of successful reposition of the inverted uterus, after twenty-two years' duration, is reported in the Buffalo *Medical and Surgical Journal*. The operation was as follows:—

June 23d, 1872.—Prof. White, with Profs. Julius F. Miner and M. G. Potter, Drs. Geo. N. Burwell and W. C. Phelps, and the writer, whom he kindly invited to accompany him, proceeded to the residence of the patient, in the town of Colden, Erie county, New York. She was found to be feeble and very anæmic, and slight hemorrhage from the tumor was then occurring. Prof. Potter, who was requested to take charge of the anæsthetic, administered some chloroform to the patient, and the tumor was then examined by several of the gentlemen present. It resembled in size and shape an ordinary hen's egg, and was suspended in the vagina by a long, narrow pedicle, continuous with its smaller extremity.

This appearance, particularly the small and elongated cervix, led some who examined it to doubt its being a uterus at all, and to consider it, rather, a polypoid growth. But a probe could not be passed along the pedicle into the os, as might have been done had the tumor been a polypus.

The uterus could not be detected by palpation over the abdomen. A probe passed up the vagina was felt both by the finger in the rectum and the hand placed over the hypogastrium; also the finger passed up the rectum came in contact with the anterior abdominal wall, as felt by the other hand; all these diagnostic means proving the absence of the uterus from the situation which it normally occupies.

By these negative proofs Dr. White was entirely convinced that the tumor was the inverted uterus, and he therefore proceeded to attempt the reposition of the same, in the presence of the above-named gentlemen, who accompanied him, and also Drs. Strong, of Colden; Davis, of Boston; and G. H. Lappham, of Aurora. Dr. Potter had produced anæsthesia by chloroform, which he now exchanged for ether, with which he kept the patient anæsthetized during the operation.

Dr. White now assumed the kneeling posture in front of the patient, who had been placed upon the bed so that her hips projected a little beyond its edge, her feet resting in the laps of Drs. Miner and Phelps, who sat upon either side of Dr. White, each supporting a knee and holding a hand of the patient. He then introduced his right hand into the vagina, and began manipulating the tumor. This manipulation consisted in compressing the uterus, which relieved its congestion, and rendered it more pliable, and in making gentle pressure in the line of the axis of the pelvis by use of the uterine repositor. After continuing this a short time, the doctor brought the tumor down to view, when a glance sufficed to assure the *doubting* of its true nature. By the pressure which had been exerted the neck had been shortened and dilated, the body and fundus reduced in size, the superior angles (now inferior) were distinctly seen, and altogether the tumor then presented the normal outline of a uterus of small size.

The operator's uterine repositor* consists of a stem of wood or hard rubber, about ten inches in length, straight or curved, one extremity of which is enlarged and cup-shaped to fit the fundus uteri, the other extremity having attached to it a coil of steel spring wire, against which the breast of the operator may be placed, who, by leaning forward, may exert a constant and gentle pressure upon the uterus, and thus relieve his other hand, with which he can facilitate the repositing, by manipulating the upper end of the uterus, either through the abdominal wall or by passing a finger up the rectum. This repositor was again introduced, and a pressure of eight or ten pounds exerted by it, and at the same time compression was made by the hand within the vagina upon the portion of the uterus protruding beyond the os, the same hand also retaining the fundus uteri and cup of the repositor in coaptation, the left hand being employed as above suggested. When, in this manner, the cervix had been made to embrace the fundus, the uterine repositor was substituted by a large rectal bougie, with which pressure was continued until the close of the operation.

At the end of an hour and fourteen minutes Dr. White was obliged to discontinue his efforts, on account of the benumbed condition of his hand, caused by the pressure upon it of the narrow and unyielding vagina.

The fundus at this time was within the cervix and above the os, and the doctor considered the reduction substantially accomplished. He requested Dr. Miner to continue the manipulation, which he did, and in sixteen minutes, or just one hour and a half from the beginning of the operation, Dr. Miner enjoyed the satisfaction of announcing that the uterus, which for twenty-

* A full description of the Uterine Repositor, illustrated with plates, will be found in the *American Journal of the Medical Sciences*, for April, 1872, and Buffalo *Medical Journal*, for May, 1872.

two years had been completely inverted, was now as completely reposited.

Two hours after the operation, when we left her, the patient was quite as comfortable as had been anticipated. An opiate was administered, and directions were given the attendants to keep her perfectly quiet for at least a fortnight. She recovered satisfactorily.

Glycerin, its Medical Properties and Uses.

Professor CHARLES A. JOY gives the following summary in the *Journal of Applied Chemistry*:—

The following recipe is for the preparation of glycerin lotion: Glycerin, 3 fluid ounces; mucilage quince seeds, U. S. D., 10 fluid drachms; pulverized cochineal, 5 grains; hot water, 1½ fluid ounces; deodorized alcohol, 2½ fluid ounces; oil rose, 8 drops; pulverized gum arabic, ½ drachm; water, 8 fluid ounces. Rub the powdered cochineal first, with the hot water gradually added, and then add the alcohol. Triturate the oil of rose with the powdered gum arabic, and gradually add the water, as in making an emulsion. With this mix well the solution first formed, and filter, and to the filtered liquid add the glycerin and mucilage of quince seeds, and shake well. The mucilage of quince seeds should always be freshly made.

A good ointment is made by boiling 80 grains of starch in one fluid ounce of glycerin. The ointment never becomes rancid; it is inodorous and does not change. Corn starch has been found best suited for the purpose. A stiff plaster can also be made with 150 grains of starch boiled in one ounce of glycerin. A sedative plaster is made with sulphate of atropia, 3 grains; veratria, 3 grains; sulphate of morphia, 8 grains; otto of roses 1 drop; hard glycerin ointment, 1 ounce.

Four parts by weight of yolk of egg rubbed in a mortar with five parts of glycerin give a preparation of great value as an unguent for application to broken surfaces of the skin. It has a honey-like consistency, is unctuous, like fatty substances, but has the advantage over them of being easily removed by water. It is also unalterable. Applied to the skin it forms a varnish, which effectually excludes the air and prevents its irritating effects. These properties render it serviceable for erysipelas and cutaneous diseases, of which it allays the action.

Anhydrous glycerin possesses the property of withdrawing water from tissues to which it is applied. Dr. Marion Sims some time ago demonstrated that a ball of lint dipped in glycerin and applied to a freely suppurating surface arrests the secretion, and the glycerin plug has been advantageously applied by other physicians.

Glycerin vaccine lymph is highly prized on account of its stable character. For its preparation the pustules of a healthy vaccinated person are opened with a needle and the effluent matter carefully removed by means of a lancet. It is put into a suitable vessel and mixed with twice its quantity of chemically pure glycerin and as much distilled water. The liquids must be thoroughly incorporated by means of a paint brush, and for preservation can be put into capillary tubes.

A glycerin ointment of much repute for chapped hands and excoriations is made as follows: One-half ounce of spermaceti is melted together with a drachm of white wax and two fluid ounces of oil of almonds, by a moderate heat; the mixture is poured into a Wedgewood mortar, when a fluid ounce of glycerin is added to it and rubbed till the ingredients are thoroughly mixed and cold.

The introduction of glycerin in small quantity into pills prevents induration and decomposition. Where resin is present it is well to add a small quantity of alcohol. In general the substitution of glycerin for syrups when prescribing medicine in liquid form is highly recommended by physicians; the reason for this recommendation may be stated as follows: It possesses great solvent power, and mixes well with most substances; it acts as a preservative to the medicine by preventing fermentation and decomposition; in the practice of children it counteracts fermentation in the stomach, acts as a nutritive, and diminishes irritation in the alimentary canal; it has no superior for giving acrid substances, such as tincture of guaiac, turpentine, ammonia, chloroform, acids, etc.

Sesquichloride of iron and glycerin have been prescribed in cases of diphtheria. The mixture consists of two ounces of pure glycerin and 20 drops of the liquor ferri sesquichloride. Half a teaspoonful is given every hour throughout the day and night until the symptoms appear to be mitigated. With the object of dissolving the exudate, a mixture of two ounces of glycerin and 20 grains of borax is similarly given in doses of a teaspoonful at a time. The good effects in cases of hoarseness and loss of voice led to the application of glycerin to the treatment of croup. The application is made by inhalation through some form of atomizing apparatus.

Dr. Fanto (*Wiener Medicinische Zeitung*) remarks that leading dermatologists are coming to use glycerin, locally applied, as a substitute for many internal remedies that have been extensively employed in cutaneous affections. Glycerin has proved especially valuable in cases of abnormal secretion of sebaceous substances. This is caused by disease of the sebaceous glands, and has its seat, not, as was formerly supposed, in the subcutaneous connective tissue, but in the corium itself. Sometimes the complaint takes the form of a hypersecretion from these glands. This occurs for the most part in infancy, and is known as *seborrhœa*. It is most commonly seen on the scalp, on the face near the ear muscles, and, more rarely, on the extremities. In such cases glycerin acts excellently in softening the hardened masses of sebum on the surface of the skin.

and in diminishing the irritation of the organs affected. In conjunction with borax, zinc, and acetate of lead, it also diminishes the amount of secretion. In many instances the treatment must be continued for a considerable time, in order to effect a cure.

Glycerin is equally useful in cases where there is a diminution of the sebaceous secretion, which may lead to pityriasis. In this harsh state of the skin, the softness and natural elasticity may be restored by rubbing glycerin into it. None but a perfectly pure article should be used.

Diagnosis of Pelvic Swellings.

In the *Lancet* we have the following abstract of two lectures by Dr. HEYWOOD SMITH:—

After a few introductory remarks on diagnosis, arising out of Hippocrates' aphorism, "The coming to a conclusion is difficult," the lecturer sketched the method he considered the best for eliciting the correct history of a case, and then, going at once to the subject, said: "I make no apology for using the word 'swelling' in preference to the ordinary Latin word 'tumor.' My reason for doing so is this: In some way or other the word *tumor*, while including all the signification of swelling, has added to it in the public mind the idea, not merely of a swelling of a part, but of a growth more or less separate or separable, and generally of a dangerous character. This idea of an entity independent of surrounding structures is often fixed so indelibly in the patient's mind that the hope of a remedy prompts the frequent question, 'Can I have it dispersed, or must it be cut out?' It seems so important to do away entirely with this erroneous impression from the minds, not only of patients, but also of ourselves, that I have used this word 'swelling' as conveying a meaning more akin to the truth. With regard to the limitation 'pelvic,' by it I would confine our present investigation to those swellings that lie wholly, or have their greater part situate, within the boundaries of the pelvis."

The exercise of the various senses as means of diagnosis was then fully explained, and the various methods usefully tabulated; but there is only room here for their partial enumeration. The sense of *touch* was divided into *immediate* and *intermediate*. Under the head of immediate touch were placed: (1) The simple digital touch (*a*) of the vagina, (*b*) of the rectum; (2) the "double touch"—bi-digital touch, or recto-vaginal examination; (3) the conjoined examination; and (4) abdominal palpation. Intermediate touch was explained to be that by the sound, whether uterine or vesical, and also by the thermometer. The sense of sight is exercised usually through specula of various devices directly on the object, or on fluids withdrawn by fine trocars, or by the microscope. Hearing is called into play in immediate or intermediate auscultation, and in discriminating between the often slight variety of note or pitch elicited from immediate or intermediate percussion. In speaking of immediate touch, Dr. Heywood Smith said: "It may here be remarked that, as a rule, the sensation of touch, as perceived by an internal examination, is such as to convey to our minds the presence of a body larger than really exists. The following explanation is submitted as not altogether improbable: The apprehension by the mind of degrees of comparison stands in relation to brain-work as given out in nervous energy. Now our ordinary measurements by the sight need but little movement of the eyes; also, on calling in touch to our aid, an object is usually grasped by several fingers at once, necessitating but little motion; but, in internal examination, it is necessary that the point of the finger should journey round a tumor in order to comprehend it, and the mind, taking cognizance of the size by the amount of motion required, builds up an idea of comparative greatness so much larger in proportion to the nervous energy expended in acquiring the information."

The lecturer then, before dividing the subject-matter under its various heads, made some remarks on the morals of vaginal examinations, in the course of which he said: "If a patient applied to a physician for diseases of the chest, he would be deemed to have gone into the case but superficially unless he had made a most thorough examination by means of every appliance that could be brought to bear on the subject. In the same way, and similarly, as a matter of course, the pelvis should be examined where there are indications of its necessity. The indelicacy lies not in the examination itself, but in making much, or indeed anything, of it; the necessity arises out of the very nature of the case, and it should never be introduced with a preface, as if it were out of the usual order of things, but undertaken in the ordinary investigation of the case, with the same unaffected ease with which a sight of the tongue would be requested."

The system of classification chosen as that considered the best under which to arrange the large amount of material was the anatomical; and the first main division was into (1) normal and (2) abnormal pelvic swellings.

1. The normal pelvic swellings may be thus enumerated—(*a*) the bladder full; (*b*) the uterus unimpregnated; (*c*) the uterus impregnated; and (*d*) the rectum loaded with fæces.

2. Abnormal pelvic swellings were considered in relation to the various organs and tissues involved, and embraced swellings connected with the bladder, the uterus (fundus and cervix), the ovaries, the oviducts, the broad ligaments, the vagina, the rectum, and, finally, any swelling within the pelvis that had not been included in the above list.

Among swellings connected with the bladder were mentioned and illustrated calculus, abscess, cancer, cystocele, foreign bodies, etc. In diseases of the uterus the

cervix uteri is the portion which most often shows itself as a pelvic swelling, especially in its state of cancer of various forms, chronic inflammation with deposit, engorgement with elongation of the cervix uteri, polypi of various kinds, and the occasional malformation of a double uterus. Cancer of the cervix uteri in its early stage has, in the form of scirrhus, to be differentiated from indurated (benignant) deposit in the labia uteri, and in the form of epithelioma to be separated from recent ulcer, syphilis, and granular inflammation seated upon a hard basis in the cervix.

For the diagnosis of these several maladies, it is not merely requisite that the different morbid appearances should be most carefully observed, but also that the histories of the cases should be most accurately gone into and traced, so as, if possible, to make the diagnosis tolerably certain by the very history, and almost independently of any examination. The cases of induration of the cervix uteri present a hardness often circumscribed, occasionally involving the whole of one lip. In these cases the submucous hardness seems to lie at a somewhat greater depth below the membrane than does the hard tissue of carcinoma.

Sometimes diseases affecting only the body or fundus uteri present themselves per vaginam as pelvic swellings. Cancer of the fundus unassociated with, or, in fact, secondary to, carcinoma cervicis is rare; yet when it does occur it may be mistaken in diagnosis for fibrous tumor. The cervix high up or the body is felt to be bulging and hard, not very tender; the os uteri not patent; no discharge; in fact, the case may lack the characteristics of cancer. The history, too, may not be much help, for women will often live for several years before they find out that they are the subjects of fibrous tumors; and in cancer, in some cases, the disease may advance some way with scarcely any pain and without discharge. In such a case the passage of the sound will generally reveal the nature of the swelling; for when it touches a cancerous mass some bleeding is usually set up, and doubtless, at the same time, some pain too. Should, however, the diagnosis be not even then cleared up, the lips of the womb should be divided freely bilaterally, when cancer would reveal itself by being forced through the os uteri. A fibrous tumor might also thus, under certain circumstances, be forced through, or rendered amenable for exploration; and in that case division might enable further remedial measures to be taken. In the case, however, of fibrous tumors the history should be taken into consideration, as these may exist without much evidence of their presence for many a year. While speaking of uterine fundal swellings, it may not be out of place here to mention chronic inversion of the uterus: a condition liable, without due care, to be mistaken for a polypus; but the passage of the sound, disclosing an invagination of cervical tissue, determines the solution of the difficulty.

The lecturer then came to consider the various versions and flexions of the uterus, inasmuch as they produced pelvic swellings which it was absolutely necessary should be differentiated from each other and from other morbid conditions for the purposes of diagnosis. In considering *anteversion* it must be borne in mind that to constitute an abnormality the uterus must lie nearly horizontally; the natural position of the organ being at right angles to the plane of the pelvic brim, and so anteverted as regards the perpendicular. In *retroversion* attention is called to some difficulty in defecation, with backache among other things, and the simple touch generally reveals the nature of the dislocation. In *retroflexion*, however, while these symptoms are generally exaggerated, there is also a post-cervical swelling separated from the cervix by a sulcus which is not found in retroversion. That this swelling is the flexed fundus is only to be demonstrated by the introduction of the uterine sound, for the proper use of which minute directions were given. *Anteflexion*, on the other hand, was described as producing more severe subjective symptoms, and for its proof requiring the careful use of the sound. These flexions were also referred to as occurring in the impregnated uterus. Other organs, some of whose morbid conditions should be ranged under the head of pelvic swellings, were then considered, namely, the ovaries as felt in chronic and acute ovaritis; also all the ovarian cyst formations, whether unilocular, multilocular, or histoid of various kinds. After referring to diseases of the oviducts, the pelvic swellings that are connected with the broad ligament claimed attention; these arise from cyst, pelvic cellulitis, abscess, periuterine serous effusion, and parauterine, or extra-peritoneal areolar hæmotocele. Cysts are scarcely distinguishable from those of the ovary save by their contents. Cellulitis is differentiated by its history from hæmatocele, and both from fibrous tumors, by the absence of constitutional symptoms with the latter and by the use of the simple touch of the uterine sound. Pelvic swellings confined to the vagina may be caused by abscess in its wall, cancer, cicatrices, fibrous tumor, syphilis, condylomata, cysts, polypi, and foreign bodies. Cancer of the rectum may produce a pelvic swelling felt per vaginam, as also rectocele.

Dr. Heywood Smith then drew attention to certain swellings that might be present in the pelvis, and which had not been included in the above classification, as increased projection of the promontory of the sacrum, exostosis, cancer of the bone of the pelvis, abscess of the kidney, extra-uterine fœtation, enterocele, hydatids, aneurism, and post-uterine intra-peritoneal hæmatocele. The bony diseases are recognized by their hardness, which, in osteo-sarcoma, is varied by portions of friability. Pyonephrosis may extend into the pelvis and produce a swelling. The diagnosis of extra-uterine fœtation was carefully gone into, and its

differentiation from fibrous tumor and ovarian cyst indicated. The rare accident of enterocele was explained, and hydatids and aneurism alluded to to render the list complete; and the last pelvic swelling considered was intra-peritoneal hæmatocele. This was explained to be more a symptom, though a very grave one, of some mischief, happening generally suddenly, in connection with some previously diseased pelvic organ. A table was shown exhibiting, in parallel columns, the differentiating signs and symptoms between it and pelvic cellulitis, extra-uterine pregnancy, ovarian cyst, fibrous tumors, retroflexion of the uterus, and extra-peritoneal hæmatocele respectively.

The lecturer concluded with these words: "In order to diagnose pelvic swellings with accuracy, it is necessary that we should habituate ourselves to an orderly, deliberate, and logical investigation of the question before us; and failing, as we so often do, to be able to grasp special pathognomonic signs, let us give our careful attention to the following: (1) to any deviation from the normal state of any function, not only of the organs affected with disease, but also of neighboring organs, or organs functionally connected; (2) to all the absolute physical changes in any part under observation which may be discovered by any means in our power. To these ends we should bring to bear all the knowledge and appliances that modern medicine has furnished us with. And when we have done all this conscientiously, and have come to a conclusion which we have every reason to believe is a right one, how humiliating to have to confess that that labor has only given us the knowledge of the existence and character of the disease, and that on arriving at a correct diagnosis we have scarcely even entered the solemn portals of our art."

Case of Excessive Hypodermic Use of Morphia.

Dr. J. B. ANDREWS reports the following case in the *American Journal of Insanity*:—

A woman, thirty years of age, single, seamstress, with no hereditary tendency to insanity; but was of a highly nervous and excitable organization, emotional and irregular in feeling; at times buoyant and lively, and then gloomy and depressed. Her health during early life was delicate, though she suffered from no definite form of disease. At the age of 20, in April, 1862, she was seized with pain in the head. It was of short duration, but very severe, and during its continuance the patient was delirious. Attacks of the same character, both in the severity of the pain and the mental disturbance, have occurred since, at intervals of from one to three months. In 1864 she had acute rheumatism, and in 1865 a severe attack of diphtheria.

After the local disease of the throat had apparently subsided, vomiting supervened, and was repeated every few hours for some five weeks. To relieve this condition and procure sleep, hypodermic injections of morphia were successfully employed, for about one week, and the patient rapidly regained her health. Some two years after this, or in July, 1867, she had an attack of inflammation of the bowels and peritoneum, and for four weeks was delirious most of the time. She improved somewhat in health, but for the four months succeeding had frequent attacks of frenzy, during which she often threatened to take her own and her mother's life, and became very difficult to control. In October following she had improved so far as to pass from the immediate charge of her physician. Soon after this he ascertained she was using hypodermic injections of morphia, to relieve pain in her limbs and different parts of her body.

A few weeks before she was sent to the asylum she passed into an acutely maniacal condition, in which she was sleepless, ate little and irregularly, lost flesh and strength rapidly, and became quite feeble. She was destructive of clothing, pulled her hair out, was noisy, incoherent, and violent; opposed care, wandered about, and was with difficulty controlled. In this condition she was admitted to the institution on the 5th of May, 1871. She was carried to the ward, and placed in bed. Examination revealed scars and ecchymosed spots, covering nearly the whole of the body which could be reached by her own hand. She asserted that she had employed the hypodermic injections for three and one-half years, once, and much of the time twice a day, making in all about two thousand injections; that during the last few months of its continuance, she had used a drachm and one-half of morphia per week; that she inserted the needle perpendicularly to the surface, and often carried its full length into the tissues. For two days she was sleepless, and retained no nourishment. Chloral, in thirty grain doses, was then administered, which was tolerated by the stomach, and secured sleep. The vomiting gradually became less frequent, and soon ceased. She ate well, gained flesh and strength, all maniacal symptoms subsided, and in twenty days she was up and about the ward. Menstruation, as she said, had been suppressed for two years. As she complained of pain in the back, and other symptoms which usually preceded it, she was placed on use of capsules of apiol, and on the 24th of June began to menstruate, but the flow was scanty, and accompanied by much pain.

During the month following she steadily gained in mental strength, and became quite stout. At time of next menstrual period the right breast swelled to an extraordinary size, so that we were obliged to suspend it with adhesive straps. It was hard and extremely sensitive to touch. This condition of swelling and tenderness extended in a narrow ridge to the spine. The state of the breast was at first supposed to be owing to the sympathetic action of the organ with the renewed activity of the menstrual function. For two weeks applications were employed, without success, to relieve the pain

and tension. At this time, on the 13th of August, the patient, in rubbing her hand over the breast, discovered an elevated point, just under the skin, which on pressure gave a pricking sensation. This was cut down upon, and a broken needle extracted. On the 15th another needle was removed. The breast was now inflamed, and extremely sensitive. August 28, another needle was taken out. August 29, menstruation began again. The flow was profuse, and she became at once delirious. Was talkative, restless, profane and obscene, and pulled her hair out. She continued in this condition some twelve hours, and, as she stated the next day, was entirely unconscious of what had occurred.

From this time till September 28 from one to five needles were removed daily from the breast. Menstruation then occurred again, and was characterized as before by a similar attack of mental disturbance. After this, during the months of October and November, needles were taken from various parts of the body; from the left breast, the abdominal *parietes*, the *Mons Veneris*, the *labia*, and *vagina*. Of these latter, some passed across the urethra, and rendered urination difficult and painful; others across the *vagina*, either end being imbedded in opposite sides. Some were removed from the thighs, from the leg, down to the ankle, from the buttocks, from about the *anus*, from the back as high up as between the shoulders. The largest number extracted in any one day was twelve.

On one occasion ether was administered, but the difficulty experienced in bringing her under its influence, and the mental disturbance produced by it, were so great that it was not again resorted to. During the whole period, to her final illness, she retained her flesh, though she ate and slept irregularly, under use of tonics and sedatives. She was in a variable mental state, at times irritable, petulant, fault-finding, attempting to create ill-feeling between attendants, and demanding unnecessary care and waiting upon. At other times she was abnormally cheerful, gay, pleasant, and fulsome of praise of all around her.

For the first two months but comparatively little pain was felt in the extraction of the needles. The skin was thickened, harsh and dry, and almost insensible, from the prolonged and distributed use of the injections. Afterward she suffered acutely, and often begged, with tears, that their removal might be postponed from day to day. About a month before death she had an attack of localized pneumonia, affecting the lower portion of right lung. This was accompanied by stridulous breathing, spasm of the glottis, *globus hystericus*, crying, and other hysterical manifestations. It was followed by an attack resembling muscular rheumatism, characterized by great pain and hyperæsthesia of surface. The right arm was swelled, hot and extremely sensitive. It was supported on a pillow and kept bathed in anodyne lotions. She lost appetite and sleep, became much depressed, and gave up all hope of recovery. Her tongue became dry and brown, pulse rapid, secretions offensive, and mind very feeble. A diarrhœa supervened and the evacuations of bowels and bladder were involuntary. She became unconscious, and finally comatose, and died on the 25th of December, 1871.

No needles were removed during the last two weeks; 286 were taken from her body during life; 11 were found in the tissues after death; three were passed from the *rectum* during sickness; making a total of 300 needles and pieces. Of this number, 246 were whole, and 54 were parts of needles.

Oxygen as a Disinfectant.

In the French journal *Les Mondes* it is said that oxygen has been tried with excellent results in purifying the air of the wards, in a great number of diseases, in the military hospital of Versailles.

Mention is also made of the discovery of M. Kopp, a German chemist, of the faculty which titanium has to absorb oxygen; also that the azotized titanium, when heated to 300° in a current of hydrogen will evolve ammonia.

M. Kirkpatrick gives the following method for producing oxygen in the cold. He makes a mixture of commercial chloride of lime with four times its weight of water, and treats it with a hydrate or compound hydrate of nickel or cobalt in solution or in suspension in water. The reaction takes place immediately, the chloride is decomposed, and oxygen is disengaged with effervescence.

Reviews and Book Notices.

BOOK NOTICES.

The Physiology of Man; designed to Represent the Existing State of Physiological Science, as applied to the Functions of the Human Body. By Austin Flint, Jr., M. D., etc. Nervous System. New York: D. Appleton & Co., 1872. 8vo, cloth, pp. 470.

This constitutes the fourth volume of the great work on human physiology which has been engaging the author's unremitting attention for a number of years. It embraces the nervous system, with the exclusion of the special senses. These, and the function of generation, will be considered in the fifth and last volume of the series.

We shall not attempt to examine in detail

the many striking views, experiments, and original suggestions put forward by the writer, and confine ourselves to mentioning the subjects he investigates. After a chapter devoted to the divisions and structure of the nervous system, he explains the distinctions of motor and sensory nerves (subtracting somewhat here from Sir Charles Bell's claims), and then passes to the separate consideration of the motor nerves of the eyeball, of the face, the spinal accessory and sublingual nerves, the trifacial and the pneumogastric. The spinal cord is then discussed in several successive chapters, after which the cerebral hemispheres, the cerebellum, the encephalic ganglia, and the sympathetic nervous system, are studied in the order given. The last chapter is devoted to a physiological consideration of sleep.

The writer adopts the positive method of investigation throughout, and avoids psychology, as not within his proper sphere. The experiments he details are admirably adapted to illustrate the facts he deduces from them; and the most judicious use has been made of all the recent essays on this branch of knowledge. Indeed, the work is throughout a model of its kind.

A Nomenclature of Diseases, with the Reports of Majority and of the Minority of the Committee thereon. Presented to the American Medical Association, at the Meeting held in Philadelphia, May, 1872. pp. 94.

This is a provisional Report of the Committee appointed two years ago by the Association, to decide upon a uniform nomenclature of diseases for this country. It is based upon that of the Royal College of Physicians of London, 1869, which is subject to a decennial revision. A number of extra copies of the Report have been printed for general distribution, with a view to obtain suggestions for its perfection before final adoption.

The classification is, in a general way, based upon anatomical considerations; but, in the details, considerable modifications of the English model have been made. Some of these are to be regretted, especially, we think, the omission of the French, German, and Italian synonyms for diseases. The importance of these in making it sure "that medical observation is occupying itself with the self-same diseases," was emphasized in the Preface (p. vi) of the London Nomenclature, and is especially obvious in this country, where there are so many foreign educated physicians.

The adoption of the *infima Latinitas* in names of diseases, instead of the more elegant but less expressive classical terms of the English edition, will probably be generally approved. The reasons given for it are satisfactory. For example, *cholera morbus* is a better term than *cholera simplex*, if we consider impartially what the purpose of the Nomenclature is. What if it is low Latin? It is, for all that, a case where we can shelter ourselves under the authority of the most elegant of Latin writers, for we are justified by the *norma loquendi*.

The more serious departures from the English model are those adopted in obedience to theoretical considerations of the nature of diseases. To some of these we doubt if many physicians will care to commit themselves. Epidemic cholera, for instance, is, in the English nomenclature, placed correctly (according to our notion) under the head of General Diseases; whereas, the American Committee remove it thence, and classify it among Diseases of the Intestines. If there are any good reasons for such important changes, they ought to be stated. The practical distinction made in the English edition between (class A) diseases in their nature general, and (class B) diseases which, at first local, become general, is omitted in the work before us. The addition of a section called "General Pathology," if intended to meet this want, does not do so. On the contrary, it adds to the confusion. To illustrate this, take the definition of *Carcinoma* (p. 2): "A morbid state of the system, in which there is a disposition to a certain malignant growth, denominated carcinoma." In other words, no distinction is made between these two very diverse meanings of the word; yet it is the very purpose of a Nomenclature to establish such distinctions. Moreover, the definition involves the theory that carcinoma is, from its outset, a general disease, which, to say the least, is questionable pathology.

The English names are placed by the American Committee first, which is convenient, but not more so than in the English edition, where one page is occupied by the

English names and definitions, and the foreign synonyms are placed on the page opposite. The American Committee advocate, in their Preface, the use of "the vernacular idioms in naming diseases." It is a departure from this rule to give preference (page 3) to "enteric fever" for typhoid fever, "cardialgia" for heartburn, etc.

How far synonyms should be allowed in a work of this kind must be a hard question. The American Committee have been parsimonious in them, too much so, we think. Nor are those they give always correct. "Irritation of the bladder," *vesical irritation*, is not a synonym of Irritable bladder, and is an infelicitous alteration of the English edition's *vesica irritabilis*. *Irritation* signifies an act; *irritability* a condition. So, page 33, *ringworm* is given as the synonym of tinea tonsurans, and of no other skin disease, when, as we all know, in the vernacular it is far more frequently applied to a very different skin affection.

It would be much easier to submit this Report to the examination asked for it in the prefatory notice, if it had been provided with either table of contents or index. As it is, however, it is certainly the product of a great deal of labor, but, unfortunately, is one of those kind of works, like dictionaries, where the lapses are easy enough to point out, while the industry and ability expended on it do not show in anything like equal proportion.

A Year-Book of Therapeutics, Pharmacy, and allied Sciences. Edited by HORATIO C. WOOD, Jr., M. D., etc. New York: William Wood & Co., 1872. 1 vol., cloth, 8vo, pp. 360.

This work comprises a series of extracts from the medical and pharmaceutical journals of 1871, selected by the editor for the periodical *New Remedies*, and now republished in book form. They are arranged under five headings, Therapeutics, Materia Medica, Toxicology, Prescriptions and Formulæ, and General Recipes. It forms a convenient work of reference for the practitioner, embracing most that is new and much that is neither new nor useful, suggested to the medical world throughout the year.

In glancing over its pages one cannot but be struck with the entire want of uniformity in the writing of prescriptions. The editor has evidently given each as he found it; but it would certainly have been within his legitimate domain to have corrected obvious solecisms. On page 297, for instance, to which we turn by chance, out of six prescriptions given, four (and one of these the editor's own) cannot be reconciled to any laws of grammar known to language. The references to journals often lack precision, the dates being omitted, and the titles abbreviated until their identities are doubtful (see p. 284). The French, English and German measures and weights are also used indifferently.

While a carefully worked-up digest, in the interest not of quantity (as is too much the case here), but of quality, accuracy, and uniformity, would be far more acceptable, we nevertheless believe that the present book will be found of substantial value to the purchaser.

NOTES ON BOOKS.

A curious essay, of historical as well as medical interest, has been published in the Transactions of Academy of Sciences, of Gottingen. It is by Dr. K. F. H. Marx, and is concerned with that peculiar cardiac affection associated with intermittent pain and a feeling of impending death. The philosopher Seneca was one of the sufferers from it. The title of the paper is *Ueber die Anfalle mit dem Gefuhle des Verscheidens, den intermittirenden chronischen Herzschmerz, das Leiden des Philosophen Lucius Annaus Seneca.*

The red corpuscles of the blood, as they appear under various circumstances and reagents, have been studied closely by Dr. W. Manassein. The title of his pamphlet is *Ueber die Dimensionen der rothen Blutkorperchen unter verschiedenen Einflussen. Histologische Beitrage zur allgemeinen Pathologie und Pharmacologie.* 1872.—*Berlin, Hirschwald.*

Mr. J. Morgan, of London, contributes a valuable work to Syphilography, in a volume recently published in London, entitled *Practical Lessons in the Nature and Treatment of the Affections produced by the contagious Diseases, with an Account of the primary Syphilitic Poison, and its Communicability, based on extensive direct and comparative Observation of the Diseases in both Sexes.*

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPT. 21, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE PREVENTION OF INFANT MORTALITY.

A most laudable endeavor was made by philanthropic gentlemen in Philadelphia and New York, this summer, by organizing free excursions for poor children, to diminish the suffering to which the young are exposed in summer. Notwithstanding this and other means, the infant mortality in both cities was something terrible to contemplate, and merits the most earnest efforts of humanitarians to prevent.

Poor parents cannot afford to take or send their young children to the country. The suggestion which has been made of the establishment of free parks at elevated points, where parents, or mothers and nurses, may camp out in the summer months in such style as suits their means or convenience, either in tents or cheap cottages, would be of small avail for the vast majority of the poor. They could not take advantage of them. It does not reach the root of the evil.

If the causes of this infant mortality are closely examined, there will be found three, of prime importance, all of which are remediable. 1. The unwholesome, impure milk used in feeding children. 2. The dirt and filth which poison the air of the streets, alleys and courts where the poor reside. 3. The ignorance of the mothers of the simplest principles of infant hygiene.

Now, as we have said, every one of these can be remedied, if philanthropic individuals and societies, backed by the proper city authorities, would set about the work in earnest.

Milk consumers' protective associations should be established, for it is the milkmen, not the farmers, who usually adulterate the milk. The courts and alleys should be kept positively *clean*, winter and summer. Unwholesome buildings should be condemned. Sewers and privies should be frequently inspected, and those deficient in construction should be repaired or destroyed. Finally, popular instruction in infant hygiene should be given the women of the lower walks of life, by free lectures, by appropriate publications, and by personal interviews.

Here is a great and a good work, and that it is most urgently called for, not only in Philadelphia and New York, but in all large towns, is most conclusively shown by statistical evidence. Some of this has lately been condensed in the form of tables by Dr. J. M. Toner, of Washington.

From these it appears that the census of the United States for 1850 showed a percentage of 39.76 of deaths of children under 5 years of age to the total deaths of all ages and the percentage in the census of 1860 had increased to 43.15. The mortality under 5 in the great cities of the country has risen to a much higher rate, the highest being in Chicago, where it has mounted from a percentage of 28.67 in 1843 to 62.83 in 1869. In 1868 the number of deaths of children under 5 to the total deaths of all ages stood in that city in the frightful proportion of 3713 of the former to 5984 of the latter, and in 1869 it had risen to 4077 under 5 to 6488 over that age.

Next comes St. Louis, where, in 1871, the

percentage was 51.10; the number of deaths under 5 being 3409 to 6670 above.

Ranging about the same as St. Louis is the percentage of infant mortality in New York. In New York city in 1869 the percentage was 51.09; the number of deaths under 5 in that year being 12,359 to 25,167 above. In that city it would appear, however, that the proportion of deaths under 5 is rather diminishing than otherwise, as during the series of years from 1835 to 1853 it had ranged from 51.02 to 57.10, while in 1866 it was but 47.73, in 1867 it was 52.10, and in 1869 but 51.09. In the year 1871 the mortality in New York amongst the children seems to have been exceptionally large, as the percentage was 77.09; the number of deaths under 5 being 1946 to 2524 above that age. In Philadelphia, too, the chances of the little folks in the fight for life seems to be rather improving, as the percentage of deaths under 5 stood as high as 51.87 in 1853, and 51.25 in 1861, while from 1862 to 1869 it has ranged from 43.22 to 46.63, and in 1870 was but 44.27.

Next to New York in infant mortality comes Baltimore, with its percentage, in 1869, of 49.85 under 5 years, though the proportion has increased but little since 1860, when it stood 48.74.

Cincinnati in 1868 had a percentage of 46.68 under 5; and Philadelphia, as above stated, the next highest percentage. In New Orleans the returns are brought down only to 1857, when the percentage was 43.85. Providence, R. I., seems to be a favorable place for the little ones, as the mortality under 5 has not, from 1865 to 1870, been above 36.99.

In Washington the mortality returns have been so inadequately made that only scattered statistics covering separate years can be obtained. In 1849 the number of deaths under 5 was 400 to 866 above; a percentage of 46.18. In 1852 there were 547 deaths under 5 to 1115 above; a percentage of 49.05. In 1858 the percentage was 45.78, the number of deaths under 5 being 429 to 437 above.

The comparative exemption of Providence, R. I., in this respect, will not appear strange to any one acquainted with the efficiency of Dr. SNOW, of that city, and the care he gives to improving its hygienic condition.

There is practical work to do in this field work of the noblest character, certain to produce immediate and gratifying results. Its direction should not be exclusively, or even mainly, in vast schemes involving heavy outlay and wide co-operation, but in personal labor, in house to house visiting, in humble, but repeated, unceasing effort, in forcing officials to perform well-recognized duties, in the prevention of daily frauds and adulterations, in teaching the homely precepts of familiar hygiene, in impressing on dull minds the value of life, in encouraging cleanliness, temperance, and thrift, in discouraging and hindering dirtiness, slovenliness, neglect of known precepts, and that apathy which is miscalled resignation.

NOTES AND COMMENTS.

The Aqua Tophana.

This once celebrated poison derived its name from Tophana, a woman who resided at Naples in the latter part of the sixteenth century. It was sold in phials, which, in order to escape the scrutiny of the government officials, were labelled "manna of St. Nicholas," purporting to be an oily liquid of reputed supernatural virtues which was said to flow from underneath the tomb of St. Nicholas of Bari. The name "manna of St. Nicholas" is familiar to all readers of *Kenilworth*, though its mention there is somewhat of an anachronism. From four to six drops of this aqua or acquetta were said to be a fatal dose, and it was asserted that the dose could be so proportioned as to operate fatally at any fixed period after its administration. Tophana, who was convicted in 1707, and subsequently strangled by the order of Charles the Sixth, confessed to having been the means of destroying six

hundred lives. The wonderful effects ascribed to this poison led to many attempts to discover its composition. It was said to be a clear liquid, tasteless, odorless, and easily miscible in all kinds of food and drink. The most probable of the many suppositions advanced regarding the composition of the aqua Tophana is that it was an arsenical solution. In support of this, Hoffman quotes a letter from Gasparelli, physician to the Emperor Charles, in which he asserts that he was informed by the emperor himself (to whom Tophana confessed the secret of her preparation) that it was a solution of arsenic in an infusion of *cymbalaria* or toad-flax.

Utilizing Sewage.

A plan has been proposed in England, by General Scott, to precipitate the organic and mineral substances contained in sewage by means of lime and clay, and to burn the sludge thus obtained in a kiln, to make a cement for building purposes. This idea is now being carried out at Ealing. The cement thus made is sold for 35s. per ton, the net profit being 10s. 4½d. per ton. General Scott does not claim to render the effluent water purer than it results from other processes; but he claims that the water thus perfectly clarified is most fit for irrigation purposes, and he further suggests that by using his precipitants with sewage in the drains, the formation of sewer gases will be almost perfectly prevented; and further that the use of lime in this way neutralizes the acidity of the sewage, which sometimes destroys the joints of the drains.

American Crania.

At the National Scientific Congress, which was in session a few weeks since in Iowa, Professor Foster described some crania collected at widely different points; on the Desplains river, in Illinois, in Indiana, and at Dunleith. They differed so much from the Caucasian and Indian skulls that it was difficult to make scientific gentlemen believe they were not distorted. They belonged to mound builders, and were found in ancient mounds.

He argued, from the powerful construction of the skull, that the living man was in his nature a ferocious brute. He instituted a comparison between these skulls and those of the Indian. The opinion was advanced that a race of men existed on this continent before the Indian. The skeletons found are about the ordinary height of men of the present day, but their mental organization must have been very low.

Sulphate of Copper in Ichthyosis.

A Belgian journal reports the case of a man aged 72, a patient in an asylum, under the care of M. Dumesnil, suffering from dementia, who was attacked with ichthyosis of the nose and face. Various remedies—ointments of *huile de cade*, of sulphur, white precipitate and other mercurial preparations, arsenic given internally, etc.—were used without success. An ointment of four parts of sulphate of copper in thirty parts of benzoated lard was then prescribed. Under its use the cutaneous affection disappeared in about three weeks. It returned, however a month later, and was again removed by the same remedy, which this time was persisted in, with the result of rendering the patient free from the disease up to the date of the report, nearly two years after the remedy was first applied.

Rise Early!

Dr. Wm. Acton says, in the last edition of his admirable treatise *On the Reproductive Organs*:—

"Although a man awakes thoroughly refreshed from his first sleep, he may arise after having taken a second doze thoroughly prostrated.

"It would be a curious and important question for physiologists to investigate why the second sleep refreshes us so slightly when compared with the first? On awaking the first thing in the morning, most persons, and especially convalescents, feel refreshed by their night's rest; but if they go to sleep again, and rise say at ten, they remain languid all day. Perhaps it may depend in a great measure upon the first sleep being sounder and quieter, and not being disturbed by the dreams to which those who indulge in the second are liable."

This is sound doctrine.

Certificates of Insanity.

The subject of improper incarcerations in lunatic asylums is again attracting public attention. The *Public Ledger*, of this city, remarks:—

"As a rule the medical faculty are very cautious in giving their signatures in cases where the patient has been personally un-

known to them. But some, we regret to say, appear to have neither caution nor scruple on the subject, giving their certificates upon casual observation of persons whose previous history, and health, and habits are unknown to them, except through the representations of others. A case in point has been brought to our attention quite recently, wherein a medical certificate of insanity has been given by a doctor in this city in the case of a person who is as perfectly sane as the Resident Physician of any hospital for the insane in the world. Taking all the circumstances of this particular case into account it is amazing that any doctor could have been so misled or so reckless."

Physicians should certainly exercise the utmost caution in such a serious matter.

Correspondence.

Effects of Chloroform. Perineal Abscess.

Eds. Med. and Surg. Reporter:

I was called, March, 1871, to set the humerus of a little boy æt. three. Inflammation having set in, and being fretful, I was forced to use chloroform. His mother remonstrated, but gave no valid reasons. In one minute the system began to relax, pulse and respirations became very feeble. The chloroform was withdrawn, but pulse and respirations ceased, face became deathly pale and eyes suddenly opened. Every appearance denoted death, but cold water and careful manipulation partially resuscitated him, the arm was set, and all went well. The mother then informed me that she had lost a child not long before, from chloroform, the physician failing to resuscitate it. It was an idiosyncrasy.

October, 1871, was consulted in regard to a watermelon seed in the trachea of a little boy æt. three. Advised delay in operation a few weeks, hoping the seed would come away. On 23d, symptoms growing worse, I determined to operate. Chloroform was prefaced by brandy; system soon relaxed, consciousness ceased, but sensibility never did. At every stroke of the knife he would writhe and show signs of great pain. The operation was *dreadfully* tedious, neck short and fleshy, but trachea finally reached, wire V introduced, body declined while the head was held back, and the seed was discharged. It was a large black seed, but the edges were worn white.

In April, 1872, I attended Mr. H. for perineal abscess, which resulted in fistula in ano, and required an operation.

July 9th, I attended Mrs. H. in confinement, at proper time, nine months. The child was jaundiced, but in twelve days, under treatment, skin became healthy, and it seemed to be doing well. On eve of 20th, first symptoms were seen of perineal abscess. It rapidly advanced, and on 23d had matured; a small puncture was made, and a discharge of about a drachm of dark pus followed. During the succeeding twelve hours it discharged over an ounce and began to slough, and continued to 29th, when bones of pelvis of left side were exposed and it died. This abscess was precisely in same locality as that of the father, and had a similar appearance. The mother is very sensitive, and susceptible of nervous impression. Did the abscess in the father's case have anything to do with that of the child?

J. R. Taylor, M. D.

Texas, Sept. 2, 1872.

Chiccory in Incontinence.

Eds. Med. and Surg. Reporter:

I am not aware that works upon *Materia Medica* class chiccory as a remedy in diseases connected with the urinary organs, or claim any medicinal properties for it. But from observation and experience in its administration and use, I am satisfied that it is a valuable medicinal agent in incontinence, the result of atony and relaxation of the sphincter and other muscles controlling the escape of the urine.

My knowledge of its efficacy in this regard was derived by the accident of observing, in the case of an individual afflicted with incontinence, that the difficulty was alleviated markedly when he, or the family of which he was a member, used *mixed* coffee, and, *vice versa*, was aggravated when *pure* Java coffee was used as the family beverage. My opportunities were peculiarly favorable for making the observation; and of the fact, derivable from such observation, as stated, I became thoroughly convinced. Profiting by the experience thus ascertained, the coffee with chiccory, that being the admixture ordinarily of the bulk coffee, was exclusively employed as the drink at family meals. The improvement continued to be more unmistakable than ever, as the result of the regimen adopted, and, being persisted in, re-

covery occurred, attributable, as I believe, to the agency of chiccory.

Subsequent experience confirms my belief in the efficiency of this agent. At present I have a case of incontinence in an old gentleman of eighty-three—a peculiar infirmity of elderly men—to whom I have prescribed a decoction of pure chiccory with decided benefit. I have not had an opportunity of prescribing this remedy in the cases of children, with whom incontinence is a common, and generally an intractable difficulty. But I would expect relief from its employment. I have suggested the agent in question because I believe it possesses valuable medicinal properties, and would like to hear the result of a trial of its use by others in the profession.

J. H. THOMPSON, M. D.

Goshen, N. Y., Sept. 13, 1872.

Cases in Toxicology.

EDS. MED. AND SURG. REPORTER:—

I send you the following notes on cases of poisoning:—

STRAMONIUM.

June 14, 1872, 6 P. M. Called to see a little girl of four, white, and of a healthy constitution. She had been in the yard with another child about the same age, when they ate some seeds from a stramonium burr. It was not mature, but the seeds were full grown.

Found the little girl with a flushed face, full and rather slow pulse, skin hot, and not dry. Pupils dilated very much, and the eyes presented a glistening appearance. She staggered on attempting to walk, and occasionally there was a convulsive starting of the lower limbs, and a backward flexure of the spine. Vision impaired, intellect somewhat affected. Also a disposition to laugh, and there was a half-smiling look all the time. Gave some whisky and water, which accelerated the pulse somewhat. Being compelled to leave, advised to send for another physician who could further observe the case. Dr. Burnett was sent for, who informed me next morning that he gave an emetic of ipecac., which brought up quite a quantity of seeds. He ordered castor oil, which before morning caused the evacuation of still more seeds. At breakfast, on the 15th, she could eat, and appeared pretty well. Pupils still dilated. The other child I did not see, but was told that vomiting occurred, and the symptoms were not alarming.

F. H. BAILEY.

Knoxville, Tenn.

The Use of Seneca.

EDS. MED. AND SURG. REPORTER:—

In the REPORTER of August 24, 1872, I observed some reasonable and pertinent remarks by D. R. Silver, M. D., Sidney, Ohio, about my combining too many remedial agents with seneca; and against attributing the alterative properties of these combinations to seneca alone.

Please, sirs, to allow me to state that I have used (as D. R. Silver, M. D., suggests) the syrup seneca separately; and although it is extremely acrid, have found it just as powerfully alterative in bronchitis as it has been when modified by correctives. In addition to this I have known the decoction of seneca, although yet more acrid, similarly efficient.

Syrup seneca, with its acridness partially obtunded by ant. et potass. tart., has to my knowledge been effective in the permanent cure of hundreds of cases of bronchitis. I have never observed any case in which antimonial wine or mist. glycyr. comp. appeared to produce any alterative effect whatever upon the bronchi. They may be beneficially employed in the first stage of bronchitis; but they can only palliate a cough of long continuance.

Such correctives, however, are exceedingly valuable when employed to render both the syrup and the decoction of seneca less disagreeable to the patients who may have occasion to use either of them.

Your obedient servant,
THOMAS BARROW, M. D.

Baltimore, Md.

A Peculiar Form of Ophthalmia as a Diagnostic Symptom in Cerebro-Spinal Meningitis and Myelitis.

EDS. MED. AND SURG. REPORTER:

This form of ophthalmia comes on about the third or fourth day. First one eye is inflamed, while the arm and leg of the opposite side is convulsed. It becomes most marked when paralysis results in the opposite side, indicating the development of myelitis. Then the other eye becomes inflamed, while the opposite side is convulsed, to be

paralyzed in its turn. The disease follows this course most frequently in children.

The conjunctiva is first slightly injected, the color gradually deepening until it assumes a peculiar pink shade. At first there is secreted from the conjunctiva a flaky white pus, gradually becoming more fluid, but always very white. The eyeball gradually sinks until it becomes flattened and sinks deep into its socket. This symptom has often enabled me to distinguish this disease, when in danger of mistaking it for convulsions from other causes, especially in children, when the case has not been under observation in its early stages. The inflammation may be attributable to an extension of the inflammation from the brain along the optic nerve.

JOHN BROWNRIGG, M. D.
Columbus, Miss.

NEWS AND MISCELLANY.

The Tri-State Medical Association.

The second annual meeting of the Tri-State Medical Association was held at the Delaware House, in Port Jervis, New York, Wednesday, September 4th.

The membership has nearly doubled in a single year, and the Association is prosperous in every particutar.

The retiring President, WM. L. APPLEY, M. D., delivered the annual address, a copy of which was requested for publication in THE MEDICAL AND SURGICAL REPORTER.

The following are the officers elected for the ensuing year:—

President—Sol. Van Etten, M. D., Port Jervis, N. Y.

Vice President—B. G. McCabe, M. D., Middletown, N. Y.

Corresponding Secretary—W. W. Appley, M. D., Cochecton, N. Y.

Recording Secretary—D. H. Decker, M. D., Monticello, N. Y.

Treasurer—Wm. H. DeLong, M. D., Equinunk, Pa.

SOL. VAN ETTEN, M. D., *President.*
D. H. DECKER, M. D., *Secretary.*

August's Temperature.

The following statement shows the mean temperature of the weather in Philadelphia during the month of August, as recorded at the Pennsylvania Hospital, viz.: 1864, 79.40; 1865, 74.74; 1866, 72.05; 1867, 75.10; 1868, 78.42; 1869, 76.30; 1870, 78.82; 1871, 78.50; 1872, 81.64.

Thus it will be seen that August last was warmer than the same month of any of the years named above, and exceeded the next warmest (1864) 2.24 degrees, and the next warmest (1870) 2.82 degrees.

A Curious Pet.

One, probably, of the strangest domestic pets ever heard of, was recently exhibited at the meeting of the British Association, by Sir John Lubbock. It was a tame wasp, which had been in his possession for about three months. The wasp was now quite tame, though at first it was rather too ready with its sting. It now ate sugar from his hand and allowed him to stroke it. The wasp had every appearance of health and happiness; and although it enjoyed an "outing" occasionally, it readily returned to its bottle, which it seemed to regard as a home.

A Piece of Old Superstition.

Our correspondent, Dr. A. D. BINKERD, calls our attention to the following absurd statement in the Pittsburg *Commercial*, of September 7:—

"CHILD'S DEATH CAUSED BY A CAT.—Portland, Me., Sept. 6.—A three months' old child of Mr. Herrick, of this city, lost its life this morning, by a cat sucking its breath while sleeping."

It is time such a relic of the dark ages as this superstition should be discarded.

A Hard-Worked Coroner.

During the month of August the Coroner held 124 inquests, and his physician made 18 post-mortem examinations.

AMONG the candidates who lately passed the anatomical examination in the University of Berlin with special approbation, was a Japanese student named Sasumi Satoo, son of the private physician of the Mikado.

THE *Siglo Medico*, of Madrid, announces a work on Internal Pathology, in verse, by Don José Zalabardo. The author states that it is on a level with the present state of science.

A BEQUEST of 10,000 francs has been made to the Academy of Medicine in Paris, by M. Falret, for the purpose of founding a prize on mental and nervous diseases.

THE celebrated French Physician Louis has lately died, at the age of eighty-six.

MARRIAGES.

WEAVER—WEAVER.—At the house of the bride's parents, on September 5th, by Rev. T. O. Stern, Dr. S. J. Weaver, of Weaversville, and Miss Mollie J. Weaver, of Lower Lancon.

DEATHS.

STEWART.—Murdered by the Indians, August 27, in Arizona, Lieutenant Reid T. Stewart, A. M., of Fifth United States Cavalry, only son of Dr. J. L. Stewart, of Erie, Pa, aged 22 years, 5 months, and 7 days.

THE

MEDICAL AND SURGICAL REPORTER.

No. 813.] PHILADELPHIA, SEPT. 23, 1872. [Vol. XXVII.—No. 13.

Original Department.

Communications.

FRACTURE OF SKULL.

By J. T. Hartigan, M. D.,
Of Washington, D. C.

Isaac J. Dent, colored, æt. 25, was struck on the head with an iron hoe, on the evening of the 11th of August, 1871. Upon receiving the blow he staggered, but soon regained his consciousness, and walked a distance of about four hundred yards to the nearest drug store.

About an hour afterwards he saw a colored physician, who brought the edges of the wound together by means of a few stitches, and ordered ice cloths and astringents; the bone was exposed, but it was thought that there was only fracture of the external table. Next morning the patient was worse, having passed a restless night, and was vomiting and much excited.

The physician was in attendance ten days, during which time, and subsequently, according to the testimony at the coroner's inquest, there was a puffy swelling of the scalp, shivering fits, and occasional marked stupor. On the seventh or eighth day the wound was reopened to allow exit for the free discharge of pus, and some loose spiculæ, the patient, after the operation, expressing great relief.

This is all that could be learned of the treatment in the case, from which it will be evident that the gravity of the injury was not fully appreciated either by the physician or friends of the patient. It would seem that the relief afforded upon the reopening of the wound alone suggested depression, and would have demanded of an ordinary observing man operative interference. Instead, however, the patient was abandoned to his fate, the delirium and stupor continuing to increase in severity, and remitting from time to time until death took place on the 14th of September.

An autopsy was made forty-eight hours afterwards. On the left side of forehead, a little above the supra-orbital ridge, there was a cicatrix an inch in length nearly healed; under this a depression was felt, and in the centre a small opening, which upon pressure discharged pus. After dissecting back the scalp some more pus escaped from this opening, and a few small spiculæ of bone which were lying loose; the hole in the skull was one-half by three-fourths of an inch, having become nearly circular from inflammatory action. Removal of the calvarium showed an abscess of the greater portion of the anterior left lobe, and congestion of the surface of the brain and its membranes.

Trephining—the operation which was indicated in this case—in various conditions, has its advocates and opponents. To army surgeons chiefly we are indebted for our information on the subject, the peculiar nature of their duties affording more ample opportunity for observation; and yet their views are as conflicting as those in civil life on other branches. It is an established axiom, however, that as the operation itself may destroy life, it should never be resorted to except in extreme cases; that is, where the indications for its use are very decided, have been present for a considerable time, or have not been assuaged by other remedial measures. Now, these indications, as generally admitted, according to Holmes, are first, when a portion of the bone is depressed

and encroaches on the cavity of the skull, producing compression of the brain, and the fragment cannot otherwise be raised; secondly, for punctured fractures by which the inner table is splintered, separated from the outer table, and lying loose on the dura mater; and thirdly, for effusion of blood, or of inflammatory products between the bones and membranes, or between the latter and the brain, when it is presumed that the effused fluid may be evacuated by the opening. It will be seen that two of these three conditions, the first and last, were present in the case described.

Neudorfer, the latest, perhaps, who has written on the subject, takes a bold stand against the present management of injuries to the skull, and is so much prejudiced against the trephine *per se*, that he advises its exclusion from the armamentarium of the military surgeon. He has gone to the extreme of substituting a chisel and mallet for the purpose of removing bone so as to extract foreign bodies from the skull, and to allow exit for the pus. Now leaving out of consideration that in either case the skull is opened, it would seem that blows from a mallet sufficient for such a purpose must necessarily produce injurious shocks to the brain, with the risk of rupturing the vessels, as well as to require a very steady hand to guide the chisel lest it should slip and penetrate the brain or membranes. He recites some remarkable recoveries, however, to substantiate his propositions; and after discussing the classes of cases regarded by most authors as calling for the procedure, he dismisses all with the exception of those in which there is intra-cranial collection of pus.

His views and mode of reasoning against the antiphlogistic treatment so generally employed are singularly interesting, being in direct variance with those of other eminent writers. All moist and cold applications are interdicted, and with the exception of keeping the bowels soluble, no medicine is required. He holds that the use of the probe, and the resort to forceps for the extraction of foreign substances, but particularly the local application of ice, are the most fruitful sources of thrombosis, pyæmia, and fatal meningitis. Blood-letting, leeching, purgatives, rigid diet, mercury and antimonials must not only not be employed as expectant measures, but should be discarded altogether. The following, quoted from a recent reviewer, shows his ingenious argument upon the inefficiency of cold as an antiphlogistic agent.

"It is evident that the supply of blood to any organ depends upon the action of the heart, and the number, size, and powers of resistance of its vessels; so long as these factors are not changed, the mass of blood circulating in the organ remains the same. This position applies to the brain, with the distinction that the quantity of blood carried by the carotids to the structures within and without the skull are capable of compensation; that is, if there be a resistance to the circulation within the skull, the quantity of blood on its exterior will be increased, while, if the reverse be the case, the greater part of the blood will be carried to the interior of the skull. Ice applied to the head can exert no direct influence upon the heart's action; we can only admit of a reflex influence; but it remains to be proved that the reflex action is capable of diminishing the frequency and force of the pulsations of the heart; and if, indeed, such were the case, it would certainly be more rational to apply ice to the breast instead of to the head. Cold acts locally by constringing the vessels of the scalp, and, on account of their diminished capacity, a part of the blood which should have been distributed to the exterior is now directed to the interior of the skull, since the entire amount sent to the head has undergone no change. Instead, therefore, of the vessels of the brain being emptied of blood through the application of cold, a directly reverse effect is produced; they become congested, and, as a result, injurious consequences must ensue. It appears to us that it would be more proper to cover the head with warm applications, by which the volume of the vessels of the scalp would be increased, and on account of their increased capacity a part of the blood would be directed from the brain to the exterior of the cranium. Experience goes to show that even upon the peripheral nerves cold acts very disadvantageously, by greatly weakening, or entirely abolishing the transmission of the nervous fluid. The brain is enclosed in a firm case, which is protected at its base by the surrounding structures, and on its convexity by the hair, which is a bad conductor of heat. We see how carefully old and bald men guard their heads against all changes of temperature, and we can hence imagine the influence which cold would exert when brought in direct contact

with an organ that is so carefully protected by nature against all changes of temperature. Although accurate experiments are wanting to demonstrate the action of cold upon the exposed brain, yet we may judge from analogy that it would be of a paralyzing or destructive nature, and that it should, on these accounts, be avoided."

With regard to the use of wine, and other alcoholic stimulants, he says that they are necessary in anæmic states of the brain. Opium, too, against which so much prejudice exists, is lauded by him, and a nourishing diet allowed when the patient is disposed to eat. Like alcohol in excess, congestion of the brain will only be produced from *full* doses of opium; but in small doses it is questionable whether its peculiar action is called forth, and even if it is, the dose can be proportioned to the effect produced. "It must be borne in mind," he continues, "that hyperæmia of the brain is less to be feared than the opposite condition, and that our efforts should be directed to maintaining that organ in such a degree of turgescence that it will remain on all sides in close contact with the skull, since under these circumstances alone will a wounded brain comport itself as one that is normal. Indeed, the circumstance cannot be too strongly insisted upon, that as soon as the turgescence of the brain—be it through too restricted a diet, loss of blood, or irritation of the injury—has become so much diminished that the greater part of its surface is not in direct contact with the skull, it will be exposed to constant inflammatory irritation from ordinary external influences."

I have dwelt thus long upon the work of Dr. Neudorfer, on account of the extreme doctrines enunciated by him. Such views, after the perusal of the writings of others, are apt to give rise to the most conflicting opinions, and to lead to the impression that the chances of life are just as good when no treatment at all has been adopted. He fails, however, to give the comparative rate of mortality of *all* his cases, and the individual extent of their injury, but satisfies himself with the statement that, after several years' experience, he has found no occasion to depart from this practice. Remarkable recoveries from injury to the skull, without treatment, occasionally come under the notice of physicians, but they are exceptional cases. A colored man came to my office, about six months ago, after walking several squares, with a wound of the head received in a *melee* shortly before. On examination I discovered a fissure of the os frontis, about an inch in length, through which was seen the glistening dura mater. I immediately sent him to the Freedman's Hospital for treatment, but next morning was surprised to find him at the police court, ready to testify against the alleged perpetrator. Dr. Reyburn, who was in charge of the hospital, told me afterwards that they could not keep the fellow in the ward; he ran off, and got well, without a bad symptom.

The views of Neudorfer are new, and to what extent they will be carried out remains to be seen. His large experience in the Schleswig, Italian, and Mexican campaigns entitles them to thoughtful consideration. It would seem to be difficult, however, to supersede the present established practice, which, except the depletion by bleeding, is so tersely summed up in the opinions of Dr. Macleod. This author advocates the trephine only when there is positive indications for its use, either from depression or the presence of pus. "To multiply cases," he says, "would be of little use. The teaching of all was to lead us to wait; to purge the patient thoroughly; to remove only such pieces of bone as could be got at with the forceps, and which were quite detached and loose; to bleed, if need be, locally, and even generally; to use cold applications when there was a fear of inflammation; to enjoin perfect rest, not only to the body generally, but, if possible, to the special senses also, by isolating the patient, and thus removing the stimuli to their exercise; to enforce the lowest diet, and to continue all this treatment for a long period, even after all danger seemed past; and, finally, to treat any incidental complications on general principles."

In conclusion, statistics might be produced showing the comparative rate of mortality of the operation of trephining, both in civil and military life; but as the result in each case must depend upon the individual extent of its injury, and there being no such classification on record, it would be difficult to deduce a satisfactory conclusion from the whole. In severe fractures, where the skull is battered in, for instance, an operation only hastens the fatal termination; while, on the other hand, with lighter injuries, there would be more reasonable hope of success.

Editorial Department.

Periscope.

Remarks on Amputations.

Dr. Kearney says, in the Cincinnati *Lancet and Observer* :—

Before attempting a comparison, with the view of determining the relative value of the circular and flap methods, it may be well to consider what are the *desiderata* as regards the ultimate characteristics of the stump. These may be stated to be a complete covering of the stump with healthy integument; a minimum of cicatrix resulting after the healing of the wound; and freedom from adhesion to the end of the bone.

The first of these objects is attained by any of the methods in vogue, as an immediate result; but it is the ultimate condition of the stump which is to be regarded; and, as the maintenance of the covering integument in position is requisite to a satisfactory result, we may consider what method of operating promises best in this respect. In the ordinary double flap operation the muscular tissue in the flaps is bent from the normal direction of its fibres in bringing the free extremities of the flaps into apposition; hence, any amount of contraction in that tissue tends to separate the edges of the skin, and thereby to prevent speedy and close adhesion. Where inflammation, with attendant swelling of the flaps, ensues, the gaping of the edges will probably be very great. When, however, the ends of the cut muscles in the face of the stump are covered with integument only, as in the circular method of amputating, this source of difficulty is avoided. There the retracting muscle is accompanied by the integument applied over its cut extremity, with very little tendency to the disturbance of the most delicate adhesions. Consequently, the tendency to gaping of the edges of the skin, in this form, is limited to what may be due to the natural contractility of that tissue, unless great inflammatory swelling of the limb occurs. Here, we think, we recognize the superiority of the circular over the flap method.

In the second place, as regards the extent of cicatrix remaining after the healing of the operation wound. This result, perhaps, is more distinctly determined by the form of operation selected than any other; for, while the double flap operation, for instance, gives a resulting cicatrix equal to the full diameter of the limb at the point of amputation, minus the shrinkage or contraction it undergoes, only the cicatrix from a circular operation is diminished by this contraction in part, but still more by the folding over and adhesion of the corners of skin at the extremities of the line of union, precisely as the corners of a grocer's paper bag are folded down. Another great advantage which may be recognized in this infolding of the redundant integument is the increased thickness given to the face of the stump by these resulting bosses, which, in fact, consist of three thicknesses of the skin at these points, and which leave the much diminished cicatrix depressed considerably below the general level.

The method by skin flaps, with a circular division of the soft parts, may here be contrasted with the ordinary circular operation. This plan, much practiced and advocated by the late Professor Syme, amounts to the circular operation, with the redundant corners of skin removed. It requires a division of the skin as low as does the circular, and has no single advantage over it that I can conceive of; but, on the other hand, is far inferior, in the fact that it results in a line of cicatrix equal to the full diameter of the part, as in the case of the ordinary double muscular flaps, and is wanting in the other advantages ascribed to the circular method.

The third desideratum mentioned is freedom from adhesion to the end of the bone. Whether this desirable result may be better obtained by one method than the other may, perhaps, be a question of doubt; but, in parts with two bones, the circular operation offers the advantage of allowing the line of union of the margins to be placed in any direction, thus enabling the operator to throw it in the interspace between the bones, and not across their ends.

In certain situations, as low in the leg, this interspace, besides being very narrow, does not correspond with the centre of the limb. To carry out the idea mentioned, in operating here it would be necessary to incise the skin obliquely, leaving it longer on the side most distant from this space. But it is not pretended that this result can be obtained unless the healing process takes place kindly, and in great part by first intention, perhaps; for inflammation and protracted suppuration is most apt to lead to retraction—it may be to the extent of a protrusion of the bone. In the third place, it remains to consider what plan of amputation results in the speediest healing of the wound. This it is difficult to decide positively; but as, according to Ballingall and others, the operation by the circular method at any particular point gives rise to a much less extent of wound than that by the formation of flaps at the same point, and as the immediate union, at least in part, is less apt to be interfered with by muscular contraction or secondary hemorrhage in the circular amputation, that method would

seem to be the one promising the speediest cure.

While claiming so many advantages for the circular method, it is not intended to deny certain others which belong to the flap operation. Among them may be specified celerity in execution, and a more shapely stump, with a thicker covering of soft parts over the end of the bone. These advantages, however, are more seeming than real; for, now that amputations are almost invariably performed with the aid of some anæsthetic, the diminution of time occupied in the operation by a few seconds, or even minutes, is of little importance. Rapidity of execution is only desired, then, as a mere matter of display, and, therefore, is unworthy of consideration. The more shapely appearance of the stump given by the double flap operation does not afford any strong argument in favor of that method, as the ultimate, and not the immediate, character of the stump is what decides the relative value of operative proceedings in this particular. Neither can it be claimed that the much and often extolled "cushion" of muscular tissue which covers the end of the bone in ordinary flap operations is a real advantage, for this cushion is not permanent, but shrinks and wastes in the course of time, as the muscular tissue degenerates, so that the covering of the end of the stump comes, at least, to consist of little, if anything, more than integument.

But there are other serious objections to the flap. A prominent one is the oblique section of the vessels, which leaves them in a state unfavorable to closure by the retraction of their coats; and hence the necessity for a greater number of ligatures than when they are cut square. For the same reason, secondary hemorrhage is much more apt to occur after a flap than after a circular operation.

The arguments in favor of the circular mode of amputating may be briefly repeated, as follows: A less extent of wound surface; better prospects for immediate union, the wound being less under the influence of muscular contraction; diminished risk of secondary hemorrhage, and irritation from ligatures, through the square division of the vessels. To these may be added, that an amputation at any given point of bone may be accomplished by the circular method with the aid of less of the soft tissues below that point than is necessitated in the formation of flaps. Or, in other words, the level at which the integument is to be divided being determined, the bone may be divided at a lower point in operating by this plan than when the flap method is used.

While advocating, as a rule, the superiority of the circular over the flap method, I am not denying the greater advantages of the latter in certain cases. Thus, where rapidity of execution is essential, as at the hip, the flap method should be preferred. And in cases where, from the condition of the soft parts, the section of the bone might be made at a lower point than practicable by the circular method, the former should be adopted.

Again, in a large limb, as high in the thigh, when the dissection of the integument would require to be carried to such an extent that the vitality of that integument would be compromised by such an extensive separation from the underlying tissues, the retention of some of the muscular tissue might be regarded as a less evil than the risk of sloughing. Here a flap amputation might be preferable to one by the other method. In the lower part of the thigh, however, and at all points where the muscles would have to be divided at a considerable distance from their superior attachments, I consider the flap amputation peculiarly inappropriate; for in such situations the injurious influence of muscular retraction will be felt in the greatest degree. In this I am advancing an opinion in direct variance with that of Dr. Ashurst, the most recent American writer on surgery, who gives a special preference to amputation by flaps, both above and below the knee; but in the absence of his reasons for the instructions he gives on this point I am unable to offer any further argument.

Before dismissing this part of my subject I desire to refer briefly to the method of amputating introduced by the late Mr. Teale, of Leeds. This method is by a long and short rectangular flap, as is well known, and is advocated mostly on the ground of the very perfect manner in which the end of the bone is covered and its protrusion rendered impossible. Other surgeons besides Mr. Teale have practiced and extolled this operation; yet I venture the opinion that a more general trial of it will lead to a reversal of the favorable views which have been formed of it, for the extravagant extent of wound surface it entails must condemn it as irrational.

The Logwood Test for Alum in Bread.

The author of this test, Mr. JOHN HORSLEY, F. C. S., thus describes it in the *American Chemist*:—

1. Make a tincture of logwood by digesting for eight hours 2 drachms of freshly-cut logwood chips in 5 ounces of methylated spirit in a wide-mouthed phial, and filter.

2. Make a saturated solution of carbonate of ammonia in distilled water.

A teaspoonful of each solution, mixed with a wineglassful of water in a white-ware dish, forms a pink-colored liquid. Bread containing alum, immersed in it for five minutes or so, and stood upon a plate to drain, will in an hour or two go blue on drying; but if no alum is present, the pink color fades away. If, on drying, a greenish tinge appears, that is an indication of copper, as carbonate of ammonia produces that color, but never a blue.

As a counter-check for iron, a piece of the moist blue-colored bread may be drenched with a few drops of glacial acetic acid, when

that containing iron is bleached of a dirty white color, but with alum a rose-pink or slight buff color will be observed.

Or it may be tried another way, thus:—Take a piece of the bread in its plain state, and having digested it in dilute acetic acid for an hour or so, press out the liquid and filter; then put in a lump of carbonate of ammonia, and, when all effervescence ceases, add to the clear liquor a few drops of solution of sulphide of potassium or sodium. If iron is present, it will be indicated by a dark color, there being no color produced with alum; but the addition of a little tincture of logwood immediately reveals it.

I might even go further, and say that, if necessary, you may quantitatively estimate the alumina thus: Take, say, ½lb. of crumb bread, digest it in a clean basin with some dilute acetic acid, and allow it to stand a few hours; then break up the mass, and pass the liquor through a glass percolator, the rim being covered with calico, repeating the percolation two or three times till the liquor is clear. Throw in a lump of carbonate of ammonia to saturation, and add tincture of logwood in excess, when, if alum is present, a dark blue color will be produced, with a flocculent blue precipitate on standing awhile. Collect this precipitate on a filter, wash it off into a dish with dilute nitric acid, and evaporate the red liquor to dryness. Collect the residue in a small Berlin crucible, and ignite it at a red heat, when a white powder will be obtained, consisting of alumina, with possibly a little lime; treat this with liquor potassæ, to dissolve out the alumina, mix with a little water, filter, and boil with carbonate of ammonia to obtain the pure alumina.

Cures of Stricture of the Urethra.

Mr. PEMBERTON says on this subject, in the Annual Address on Surgery, to the British Medical Association:—

Have we to deal with a simple stricture that has resulted from inflammation of the lining membrane of the urethral canal, or with a stricture, originally of this kind, which has been aggravated and increased in extent by ill-considered surgical proceedings?

For the first, there is a cure by simple dilatation. For the second, there properly is no cure. Once organic stricture, always organic stricture, is my belief. Whenever the lining membrane of the urethra has been injured, whether by accident, disease, or by bad surgery, the spot will contract and establish permanent stricture, and I do not believe that the materials constituting such cicatricial narrowing are ever absorbed.

If you endeavor to restore the normal calibre of the urethra under these conditions by ever so well considered a system of dilatation, my opinion is that the contraction will return sooner or later with increased vigor, the natural elasticity of the canal being gone; in other words, dilatation will not effect a cure, and never does effect a cure.

But dilatation, if it be well and properly carried out, will protect the patient against the occurrence of those diseases which, dependent on individual health and mode of life, arise either rapidly or slowly in all cases of stricture. The degree to which it is necessary to carry this may fairly allow of discussion; for I have ever before my mind the conviction that the very means made use of to effect the so-called cure may become the certain cause of the continuance, and, in many cases, of the increase, of the malady.

I think it will be admitted that the tendency to narrowing in cases of stricture differs very markedly in individuals. Some may show few signs of change during many years, others, especially those arising from the effects of laceration by direct violence, certainly, surely, and often rapidly increase. In all cases, treatment by dilatation is necessary; but I doubt myself whether it is needful always to endeavor to restore the standard of the canal to the utmost of its original extent. I believe that there are many cases which admit of being maintained at a standard short of this, depending, however, on the facility with which the contraction yields, and its rate of increase subsequently. And it must never be forgotten that when once this treatment by dilatation has been commenced—no matter how carefully or how thoroughly it may have been done—it will have to be continued, whether at the hands of the surgeon or of the patient, more or less during life.

For my own part, time being given, I do not believe that there is any stricture through which an instrument cannot be passed by a skillful surgeon. This being so, treatment by gradual dilatation follows; and in my judgment this should be by the silver catheter, as the safest, simplest, and most certain instrument in the greatest number of hands yet given to us, *bougie a boule* and *bougie olivaire* notwithstanding. If the induration be cartilaginous, non-dilatable, or if there be fistula, the treatment by external division on a grooved staff should be adopted as speedily as possible.

Entertaining this view of the permanence of the changes established in the urethra by injury or disease, I am not very likely to favor any internal severance of the lining of the canal, whether by Mr. Holt's method of so-called "splitting," or by any form of internal cutting. I believe a wound is produced just as much in the one case as in the other. I regard these methods as artificially inducing the very conditions which I lament should result from almost unavoidable causes; and I further believe that a shut-up wound on the internal face of the lining of the urethra is attended by dangers, from which an open wound on the outside face is comparatively free* I have had occasion to divide the urethra after Professor Syme's method in upwards of thirty cases. In one case only was there a fatal ending, and this from pyæmia. In no case was there a re-

* I will, with Sir H. Thompson, admit its use in narrowings at the external meatus.—*Pathology and Treatment of Stricture.* Third edition.

lapse, provided that an instrument was passed from time to time, the frequency of this being determined by individual tendency to re-contraction, once a month to once in three months being about the average; and by this means the calibre of the urethra was without difficulty maintained at its original standard. All the cases that I have seen, save one, have required this continued resort to dilatation, and will require it, in my judgment, more or less, during life. For there is no more a cure by this, than by dilatation or splitting. In the case that did not require it a fistula remained permanently in the perinæum, letting through a little urine, the general stream flowing by the urethra, which at the end of twelve years shows no disposition to contract.

If the induration of the urethra, and narrowing, be of such an extent as to preclude the idea of dealing with it by external division, I prefer to tap the bladder by the rectum. I do not feel inclined, at present, to divide from the bulb to the meatus; and this literally must be the length of an incision in many of these long-standing cases, if the entire disease is to be dealt with.

There are numbers of these inveterate cases wholly unsuited to external division; but they are eminently calculated to be dealt with by a method which deviates the course of the urine to another channel, in order that rest may heal the fistulæ, and absorb much of that adventitious material blocking up the natural urethra, which can then readily be found, and have a standard established almost without resort to dilatation.

I frankly say that I do not believe that either internal or external division of any urethra will cause the healing of fistulæ in the groin, buttock, and perinæum, where a man passes his urine, as it has been graphically described, like a watering-pot.

Surely, relief by the rectum will stand comparison with all the manœuvres that have been suggested from the days of Hunter to Grainger, and from Grainger, who, by-the-bye, belonged to us here, to Gouley and Wheelhouse. I cannot conceive why a patient is to sustain—sometimes for hours together—the distress belonging to hopeless attempts made to trace, in that stage of the disease, an impracticable canal, when the chief cause of the malady—the flow of urine—can be reached and diverted in a moment. Since Mr. Cock published his views (*Medico-Chirurgical Transactions*, volume xxxv. p. 153), now just twenty years ago, I have had many opportunities of seeing the results of this proceeding.

I am able confidently to state that it is wholly free from danger. Indeed, I can scarcely conceive death following as a direct result of the operation. So little fear of the proceeding had one of my patients that he has been tapped at least six times for the relief of fleeting attacks of retention, dependent on a rapidly distended bladder, unable to empty itself in the presence of long-standing organic stricture. I have seen him almost within a day or two afterwards as if nothing had occurred. Further no fistula remains, for the opening in the rectum invariably closes after a few weeks.

I have left in the silver canula for three weeks, and have not found inconvenience from its presence; indeed, it appears to me that one of the greatest arguments in favor of its adoption exists in the fact of the position of the canula, which, while certainly securing the emptying of the bladder, is wholly removed from the urethra. I am strongly myself of opinion that many urinary cases terminate fatally from urethral irritation, set going and kept up by an instrument retained in the canal in its length.

Some persons are very tolerant of tied-in catheters, whilst others, dependent on a certain idiosyncrasy, cannot sustain with impunity the simple introduction of an instrument. I saw a case in a young man which all but ended fatally from epileptic convulsions, induced by a first catheter; whilst the single introduction of a lithotrite in a man of 77, to measure a large smooth stone that had been carried with impunity for years, set up such an attack of cystitis that death ensued. I was very much impressed by a case in which a man, suffering from complete paralysis from the bladder downwards, owing to concussion of the spine, had a silver catheter tied in his bladder. He appeared sinking fast, and the most profound irritation of the bladder was established. I directed the urine to be drawn off every eight hours, and he began from that moment to amend, and ultimately recovered. Here, doubtless, the true explanation lay not in idiosyncrasy, but in the fact of the existence of disease from the injury. You may leave an instrument in the bladder for years, from the perinæum, but you cannot do this with impunity and traverse the length of the urethra. Morbid sympathies become excited in connection with the urethra, which are not produced by the introduction of instruments into other mucous channels.

In what I have said, I have urged the adoption of tapping by the rectum, as affording assured relief to the most inveterate forms of stricture. And in considering the treatment of this disease, I have hitherto limited my observations to cases of stricture of the urethra *per se*, not to those complicated by retention of urine. I must equally urge it, however, as the remedy most reasonable for almost every form of retention. It is the absolute cure of spasmodic stricture; and if, in any given case arising from this cause, after one good effort has been made to obtain relief by ordinary means, there is no success, it should be carried into effect. If retention be present with an impermeable urethra from organic stricture, a double necessity supports its selection, whilst I have yet to learn that it is inadmissible in the retention of old people from enlarged prostate. I know that it can be accomplished in these cases, but of course not so readily as if the rectum

had only its ordinary contents; and I am quite satisfied that far less irritation would be produced in the majority of these diseases, where death so often directly results from the effects of instrumental measures, by the presence, at the most depending part of the bladder, of a harmless tube, calculated to secure the removal of all urine secreted, and thus master that inevitable decomposition which is not overcome by any other method in use, for the simple reason that one and all fail to empty the bladder. If the membranous urethra bulge behind a stricture, or if any abscess opened in the perinæum suggest a ready path to the bladder, by all means let a female catheter effect, through the perinæum, what otherwise, I maintain, can be accomplished by the rectum.

Some years ago I asked the question, "Can the urethral canal be permanently restored whenever any complete and considerable portion of its length has been entirely destroyed?" I believe the answer must yet be "No." I had then a boy of sixteen, with at least two inches completely destroyed by burning; and, believing this, I established him with a silver perinæal tube, through which he now (aged 27) passes his urine without trouble; but there is nothing in the growth of the parts that tempts me to interfere, for I know the whole circle of the canal must be gone.

I think, however, that if only a streak of mucous membrane lingers about the part, an efficient connection can be re-established even after the lapse of many years.

I saw in the early part of this year a patient, aged 30, who had sustained, eighteen years previously, such a laceration, that two inches below the meatus was a fistulous opening into the urethra, three-quarters of an inch long. The canal was pervious from the meatus to about one inch above the bulb, where was a second small fistula; then, the canal was obliterated for an inch, and a third fistula, placed just at the commencement of the membranous division, gave exit to all his urine. For eighteen years, then, the urethra from this spot had been unused. I first closed the penile fistula, paring the edges, which looked beautifully in apposition for some days, and then came apart as usual. But by clipping the penis with a self-acting spring, on the principle of the *serre fine*, the edges were admirably united. Then I laid the lower fistula into one, dividing all the hard textures between them, and passed an eight catheter, and for forty-eight hours tied it in the bladder. After this I passed a nine daily. The patient learned to pass it in a week himself; and at this time the canal is in excellent order, with the introduction once a week. Now, I do not think the roof of the urethra was destroyed here, and hence the reason of a success which I did not expect.

In reference to the repair of penile and scrotal fistulæ, I would remark that they can alone be treated satisfactorily by the urine being drained through the rectum, or, as here, through the perinæum. Even then, union by first intention is a myth; but union can be obtained by keeping the granulating edges together by some artificial means, at the same time that vivacity is maintained in them by the use of the acetum lyttæ.

Is Consumption Contagious?

Dr. Richard Payne Cotton, F. R. C. P., Senior Physician to the Hospital for Consumption, etc., Brompton, says, in the *British Medical Journal*:—

There is no question in connection with phthisis of more practical interest and importance than that of contagion; and there is none other perhaps about which there exists so great a diversity of opinion. It is well known that throughout Italy consumption is classed not only by the public, but also by most physicians, amongst the diseases propagated by contagion; and so greatly dreaded is this supposed character of the disease, that in many parts of Italy the clothes of consumptives are quite as carefully subjected either to destruction or disinfection, as if they had belonged to patients who had been affected with small-pox or scarlet fever. In Germany, the opinions on contagion as regards phthisis are divided; and in France there is an equal want of unanimity upon the point. In our own country, both the medical and general opinions upon the subject are very far from being settled; and while some are quite Italian in their views, others—and probably the great majority—believe quite as fully in the non-contagiousness of the disease. We may possibly explain this wide difference of opinion by the recollection that phthisis, notwithstanding all we know of it, is nevertheless so obscure a malady, and arises under such a multitude of very different and apparently opposite conditions, that it must of necessity be frequently associated with circumstances not merely suspicious, but to some minds sufficiently conclusive of a contagious origin.

If the contagion doctrine be correct, not only must it completely revolutionize both the medical and social treatment of phthisis, by rendering the poor consumptive sufferer a being quite as much to be dreaded as was the leper of old, but it must at once crush every hope of our lessening the ravages of so terrible a scourge, by the manifest impossibility of our ever being able to "stamp out" so universally prevalent a morbid element as tubercular poison. If phthisis be contagious, it is obvious that every consumption hospital must be nothing less than a pest-house; and, instead of lessening disease and suffering, must tend only to their aggravation.

Numerous as have been the believers in the contagiousness of phthisis, no one had fully developed and openly advocated such a doctrine until Dr. William Budd published his startling, but clearly expressed and evidently well-matured views upon the subject. In this paper Dr. Budd expressed his con-

viction that consumption is a zymotic disease of specific and highly contagious nature, closely allied in such respect to the most contagious diseases with which we are acquainted, viz., scarlatina, typhus, and syphilis, the tubercular material itself being the specific and morbid poison in which the malady originates, and by which it is disseminated through society.

Notwithstanding the high authority under which this view of phthisis is propounded, I most unhesitatingly declare my conviction of its fallacy. Consumption I believe to be a purely constitutional disease, which may be either inherited or acquired, but which, from its very nature, is incapable of being conveyed from one person to another in the ordinary sense of the word contagion. I have, indeed, never met with a case of pulmonary phthisis, however apparently due to a contagious origin, which could not be much more easily and rationally accounted for by generally recognized causes, than by the doctrine of specific and contagious influences. It is quite true, that persons previously in fair health are sometimes seen to succumb to phthisis after having attended the last illness of some consumptive relative or friend; but when it is remembered that anything which lowers the physical and nervous powers and depresses the general health is of itself sufficient either to originate phthisis or to develop some hitherto latent tendency to it, we have, I consider, a sufficient explanation of very many such cases, and might even wonder that they are not more frequently happening. In all instances of phthisis originating under such circumstances, it has long been my habit to make, as far as possible, a complete inquiry into their general, and more especially their family, histories; and I have invariably been led to the conclusion that the long nursing and the close connection with the disease was at most the *exciting* cause of its subsequent development, the predisposing one having been, for the most part, sufficiently apparent, either in a previously existing hereditary taint, or in some other cause far removed from the idea of contagion. If consumption were "caught" like a zymotic disease, how few in comparison must be the instances of escape to those of infection after contact with it; whilst it must be in the experience of us all that cases, arising even under the most suspicious circumstances as regards contagion, are by no means common, and bear a very small proportion to those in which, after the closest contact with the malady, no ill effects have resulted.

It must nevertheless be admitted that cases now and then occur in which consumption has become developed in the widowers or widows of those who have died of the disease, and under circumstances apparently favoring the doctrine of contagion. I have met with several such instances; but from notes taken at the time, I find the very curious fact that they have chiefly occurred amongst women. Such cases, however, do not, in my opinion, give the least support to the doctrine of contagion, but may be explained in a very different way. The union of husband and wife is not only a religious and social, but also a *physiological* one, as may be easily shown by our daily experience. It has often been remarked, for example, that after a variable period of married intercourse, the one person is seen to resemble the other, not merely in manner and habit, but in feature and expression. The offspring, too, of second marriages has been frequently known to resemble, both in feature and character, the husband of the previous union. So well established, indeed, is this corresponding physiological fact with respect to the lower animals, that it has to be ever borne in mind in their breeding and rearing. If, therefore, certain natural and healthy peculiarities can be imparted from husband to wife, or *vice versa*, there is every reason for concluding that morbid diseases, peculiarities and tendencies, may equally be imparted. But there is another and a less mystical way in which it may fairly be concluded that phthisis may be conveyed from husband to wife. A phthisical father may communicate to the *fœtus in utero* a consumptive taint, which may thus be indirectly transmitted to the mother, just as we well know is often the case with secondary syphilis. And it may be due to this circumstance that, as I have already observed, phthisis arising under such apparently contagious conditions is much more frequently met with in women than in men. I believe, therefore, that in one or other of these ways —either by a transmission through the offspring, or by a mysterious and inexplicable connection between husband and wife— phthisis may sometimes be developed in either of them; and that we need not resort to zymotic influences in explanation of such an occurrence.

Upon the question of contagion, however, practical evidence is of far more value than anything speculative; and as a great experiment upon the zymotic character of phthisis has long been going on at the Consumption Hospital, I shall briefly give the results.

The Consumption Hospital was opened in the year 1846, with ninety beds. Ten years later it was completed; and since that time two hundred beds have been constantly occupied. We have lost, during this long period, only one nurse from phthisis; and this was a poor creature whose husband had deserted her, and who had long endured, from other causes also, considerable mental anxiety and physical exhaustion. On the other hand, the services of the nurses generally have been unusually prolonged; and I can myself testify to their general health being, as a rule, remarkably good. Of those *now resident*, two have been at duty in the hospital seventeen years; one has resided thirteen years; one, eleven years; two, ten years; two, nine years; one, seven years; one, four years; two, three years; and four, two years. The two oldest nurses have lately died of old age and general decay, after hav-

ing long been superannuated; each of these had resided in the hospital for upwards of twenty years.

Of the gallery maids, whose duty it is to be much within the wards in sweeping and scrubbing the floors, only one has been known to have been affected with phthisis; whilst it is obvious that, during so long a period, the numbers of persons thus employed must have been considerable.

Our engineer has seen eighteen years' duty within the hospital, and he is now in good health.

We have had, at different times, three attendants in the *post-mortem* room. The first of these is still living, but in infirm health, the result of intemperance; the second left with spinal disease; the third has been in his office for nearly four years, and is in good health.

Of the dispensers, one who kept to his post for above ten years is living and well; three who have held office in the dispensary since the year 1867 are also well; and the present senior dispenser has been with us for ten years. Many others have been in this department since the opening of the hospital, but only one has been known to have been consumptive.

The resident clinical assistants, of whom we are able to obtain reliable information, amount to seventy-eight in number. Three of these are said to be phthisical; but only one has been known to have died of phthisis. This gentleman I knew intimately; he was always of consumptive appearance, and one of his sisters had died of phthisis.

Our resident medical officer, Mr. Edwards, to whom I am indebted for the statistics I am now giving, has held office for more than twenty-one years; and all those who know him can testify both to his continued health and his undiminished energy and usefulness. The present matron has also been in her office for more than twenty-one years, during which long period her health has been excellent.

The present secretary has been at his post for fifteen years; and his only predecessor, who is still alive and well, had held the same office for sixteen years. The assistant secretary has been at his duties within the hospital for eighteen years; and a clerk—whose office it is to register the out-patients, and who must, on that account, be exposed to an unusually great extent to phthisical contagion, did such exist—has been at his work for five years. I am happy to add that all of the above are now in excellent health.

The present chaplain has been with us for twenty-two years; and his two predecessors are still living. Happily all of them are well.

Of the staff of physicians and assistant physicians—nineteen in number—one only has been affected with phthisis; and he was a young man of delicate and decidedly consumptive aspect. The period of office which some of us have had is unusually long. Of the present physicians, two have been upon the staff twenty-four years each; one for seventeen years; one for thirteen years; one for nine years; and one for five years. The late senior physician, who resigned only three years ago, had been attached to the hospital, and in constant work there, from its very foundation. Two of the former physicians who resigned their appointments, and subsequently died of disease quite distinct from phthisis, had held office in the hospital for fifteen and nineteen years respectively.

I have elsewhere given my experience of the statistics of phthisis, in one of our chief metropolitan hospitals; and the subsequent observation which I have had only tends to convince me the more that the evidence in this respect is greatly in favor of the Hospital for Consumption.

With the above facts before us, must it not appear to all believers in the doctrine of phthisis originating in a special and contagious poison, that a residence in the Consumption Hospital, and long-continued working in its wards, is a very good way indeed *not to catch the disease?*

On the Modern Art of Tinting Opacities of the Cornea.

Dr. Charles Bell Taylor, F. R. C. S. E., Nottingham, says, in the *British Medical Journal*:—

Extensive leucomata and dense opacities of the cornea have long been considered among the opprobria of surgery; we could not remove them; they were always a source of embarrassment to the surgeon, and, especially in the case of women and young persons, a serious trouble to the patient, so much so that I am convinced that patients suffering from this cosmetic defect and applying for relief cared more for the removal of the deformity than for the restoration of the partially intercepted sight. Such being the case, we hail with gratitude, as a most important addition to modern ophthalmic surgery, M. Wecker's reintroduction and perfection of an ancient method of tinting away these unsightly defects.

The operation, which, as a rule, causes very little pain or irritation, is best performed with a number of the finest needles firmly bound with the points on a level around a handle, such as a penholder, or a large needle which has been grooved for the purpose by Messrs. Weiss may be substituted with advantage in certain cases. The substance which M. Wecker recommends for tinting is Indian ink; but I have also employed sepia, ultramarine, and other colors with advantage, and when an immediate and deeply colored effect has been desirable, a combination of lamp-black with Indian ink, and a solution of nitrate of silver. The patient may either recline or be seated in a chair, and it is well to separate the iris with a speculum and steady the globe with a pair of ordinary forceps, taking a firm grasp of the conjunctiva. The needles are then dipped in one or other of the solutions in question, which should be made as thick as

possible, and the superficial layers of the cicatrix are rapidly punctured in an oblique direction, and layers of the solution applied just as in ordinary tattooing, until the white speck is changed from a most apparent deformity into a black surface scarcely visible; a fresh layer of the substance is then applied over the tattooed cicatrix, the patient is directed to keep his eyes open, so as to let it dry on and remain as long as possible, and he may at once go about his usual avocations.

It is important not to close the eye, and to prevent, as far as possible, the washing away of the pigment by the tears; this is best accomplished by enveloping the operator's fingers with a silk handkerchief, so as to mop up the secretion, and afterwards by the avoidance of winking on the part of the patient. M. Wecker is content with ten or fifteen punctures a time, and requires from his patients four or five sittings. I have, however, usually completed the operation at once, and made any little addition that might appear necessary some weeks later; the slightest specks, such as are left after phlyctenular conjunctivitis and small ulcers of the cornea, are easily banished by one or two pricks of the needle; and when the whole eye has been opaque, very unsightly, and sight completely abolished, I have very advantageously substituted extirpation of the globe, or the superimposition of an artificial eye, by tattooing a round central pupil, so as to restore to a remarkable and most charming degree the natural appearance of the globe. Not only is deformity removed by this slight operation, but patients generally tell us their sight is improved, a fact due, no doubt, to the circumstance that a black speck is much less dazzling than a white one.

In cases of large cicatrices, I generally make an artificial pupil first, and tint the opacity afterwards; and when this is carefully done, it is difficult to distinguish the black speck from the neighboring artificial pupil. I have no doubt that this little operation will also be found of service in cases where considerable dazzling follows the removal of a portion of iris, either *per se*, or when the operation has constituted a part of the operation of extraction for cataract; as by tattooing the cornea an invisible opacity may be occasioned which will constitute a permanent shade, and shut out the light to any required extent; soft cicatrices are readily colored, but old, hard, and incrusted ones are more difficult of treatment. In these cases, the nitrate of silver and lamp-black are of service; no doubt, also, lead, sulphur, charcoal, gunpowder, and other ingredients will come to be employed in time. In some cases, the coloration is not very permanent, but it may always be repeated; and even if the perfect blackness do not remain, a greyish semi-transparent coloration takes its place, which looks very like cornea, and it is infinitely preferable to the original deformity.

It is well to commence the tattoo at the lowest surface to be operated on, in order that the operator's sight may not be obscured by an overflow of the liquid. I shall conclude by quoting a case in which this addition to our armamentarium enabled me to render a real service to a young lady who was suffering not only from loss of sight, but also from a most embarrassing deformity.

Extra-Uterine Pregnancy.

Dr. W. A. MATTHEWS, M. D., of Fort Valley, Georgia, reports the following case in the Atlanta *Medical and Surgical Journal:*

Sylvia, a colored woman, aged about twenty-six years, the mother of two children, the youngest six years old, presented symptoms of pregnancy in July last, and the latter part of September was noticeably enlarged. About the 1st of October, being greatly shocked by witnessing the stabbing of a man on the plantation where she was living, she commenced reducing in size, and all indications of pregnancy disappeared.

In November, indications of pregnancy again existed; about the 25th of the month she was attacked with symptoms threatening abortion, for which laudanum was given, and relief afforded. During the months of December and January she had frequent returns of similar attacks, and came under the care of Dr. W. L. Jones, an intelligent practitioner of Crawford county, who was repeatedly called to see her when thus troubled.

About the 28th of January I visited Sylvia the first time; learned she had been in great pain, seemingly "hard labor," but was nearly easy when I arrived. On examination I found the os firmly closed, and great tenderness. On placing my hand over the pubic region I detected evident enlargement, such as indicated at least her fourth month of utero-gestation, and extreme soreness. The enlargement, she said, commenced in the left side. On interrogating the woman, she informed me that she first felt the movement of the fœtus about Christmas, and frequently since. The tenderness over the inter-uterine region being so great, I prescribed a blister, which was followed by prompt relief. She had tolerable health until about the 1st of March, pains occasionally recurring, sometimes ceasing; at other times anodynes were given.

I heard nothing from the case, directly, until the 17th day of June, when I received a note from Dr. Jones requesting me to see the woman with him. I went immediately as requested. Found her quiet, all pains having ceased. The doctor informed me he found her, on his arrival, in much pain, indicating very active labor, though no impression whatever had been made upon the os uteri, which he could just touch, it being very high up. By request I examined her, and found her condition as represented, os closed perfectly, and seem-

ingly *unusually* hard. Enjoining quietude, we left her.

On the —— day of June I was again summoned to see the woman (Dr. Jones being sick), and it not being convenient for me to see her, I requested my friend and partner, Dr. W. J. Greene, to visit her. Dr. Greene found the pains to have ceased, which had been *very* violent, and the woman perfectly quiet. The doctor instituted an examination; thought he passed his finger into the cavity of the uterus, and expressed the opinion that it (the womb) contained nothing, which opinion was correct, as the sequel proved.

Three days thereafter I was again sent for, the pains having returned with unusual violence. I found her quiet, all pains having ceased. Wishing to see the patient when under the influence of uterine contractions, I remained all night, and about two o'clock in the morning was notified the pains had returned. I went immediately to her house, and during a most violent paroxysm of pain examined the os, but found no impression was made by the contraction, although so strong. I also examined the abdomen during a paroxysm, which presented a rather peculiar appearance, being flattened on each side, and very prominent along the median line. My examinations, with the history given by Sylvia of her condition during her last pregnancy, etc., induced me to believe that there was probably induration, from some cause, of the *inner* os, preventing dilatation, as I thought I could distinctly detect the external os to be open and soft. The account given by Sylvia, above referred to, was to the effect that during her pregnancy with her last child she was, as she believed, in a similar condition, suffered much, and was for a long time under medical treatment; that on one occasion several physicians met in consultation on her case, and determined to open her abdomen; that while making preparations for the operation, one of the physicians proposed to defer it for a time, which was agreed to; and in four weeks, after an unusually hard labor of about fourteen hours, she was delivered of her now living child.

Three days subsequent to my last visit, with Drs. Greene and Jones, I again saw Sylvia. Found her in a high fever, with violent pains in her head, having had several convulsions. Bled her, and applied cold water to the head, which afforded relief. No change in the condition of the uterus. We prescribed rest, and small doses of tartrate of antimony to keep down excitement and cause relaxation.

Dr. Jones saw the case every day or two. There was no material change nor return of pains until the 24th of June, about one week subsequent to my last visit, when she was again attacked with pains, the last of which, as I was informed by an intelligent lady who was present, continued forty minutes, without any *seeming* relaxation. During this pain a noise was distinctly heard by all present, as of "something bursting" in the abdomen; felt also by the sufferer. The pains ceased, and she had no more. Within a few hours she commenced complaining of abdominal tenderness, which increased rapidly until the time of her death, four days thereafter.

About eighteen hours after her death, in presence of Drs. Greene and Jones, I opened the abdomen carefully. A large quantity of bloody water gushed out, with some coagula. The fœtus, a *very* plump, well-developed female child, was found lying rather obliquely with its face to the right side, in contact with the liver, its breech to the symphysis, the umbilical cord passing over the body. After severing the cord and removing the fœtus, I traced the cord to the placenta, which was found in the side near the left ovary, attached to the Fallopian tube and adjacent parts. The Fallopian tube seemed to have been lacerated obliquely, and presented a very dark appearance, as did also the omentum. The uterus was then examined and removed, and found to be empty, as Dr. Greene supposed. It was about as large as the head of a small fœtus, and presented a rather peculiar, shapeless appearance, of a dull, whitish color.

Researches on Quinine and Iron.

We are indebted, says the *British Medical Journal*, to *L' Union Medicale* for the knowledge of a communication lately made by M. C. ROBIN, in the name of M. Rabuteau, to the Academy of Sciences. It treats of the investigations of the physiological properties of quinic acid, and the reduction of perchloride of iron in the organism. Quinic acid, which is solid, and tastes like vegetable acids, such as tartaric and citric, exists in a remarkable quantity in bark, in which it is said to be combined with quinine, cinchonine, and lime. The author has prepared quinate of soda and quinate of potassa by disolving quinic acid in the bicarbonates of these two bases, and he has made many experiments with these two salts, which are neutral in reaction, deliquescent, and tasteless. He injected into the veins of a dog five grammes of quinate of soda dissolved in forty grammes of water. The only result of this operation was marked constipation. The urine became neutral, and even slightly alkaline, although previously acid. M. Rabuteau took himself two grammes of the quinate of potassa in fifty grammes of water. The urine did not become alkaline, doubtless because the salt was too much diluted, but its acidity was diminished. A watery solution of quinic acid introduced into the stomach does not produce any particular result. From this acid can be prepared a lemonade as agreeable as the tartaric and citric lemonades. These researches show that quinic acid is harmless, and also that it acts almost like all the ordinary vegetable acids; that is to say, it is consumed in the organism, the alkaline quinates being trans-

formed into bicarbonates, which render the urine alkaline when administered in sufficient doses; for example, five or six grammes at least in the day. From the quinate of soda producing constipation after its injection into the blood, it is concluded that, if introduced into the digestive tube in sufficient quantity, it would produce purgative effects, according to the general rule that saline purgatives constipate when they are injected into the blood. The alkaline quinates being destitute of taste, it might be thought that the quinate of quinine would be less sapid than the sulphates. This salt, however, is bitter, like all the other salts of quinine. According to the experiments of M. Rabuteau, the perchloride of iron is reduced by contact with albuminous and various organic substances. It follows from this that, when ferruginous waters containing sesquioxide of iron are taken, for example, in water in which a red-hot iron has been cooled, perchloride of iron is formed by the hydrochloric acid of the gastric juice, and is transformed into protochloride of iron. When perchloride of iron is injected into a varicose vein to obliterate it, it forms a cord, owing to the coagulation of blood produced by this salt; but this cord disappears gradually, for the perchloride is changed into the protochloride, which has not the power of coagulating the blood, but even prevents coagulation, as has been shown by direct injection of it into the veins of animals.

Connection Between Pulmonary Hemorrhage and Phthisis.

In a paper contributed by Dr. JULIUS SOMMERBRODT, of Breslau, to the June number of *Virchow's Archives*, the question whether the extravasation of blood into the air-cells of the lungs is ever the cause of consumption is very fully discussed. Numerous experiments were made by injecting blood taken from their own bodies into the trachæ of dogs; the animals being killed at periods of time varying from one hour to twelve days after the operation. In those soonest killed the blood was found to have penetrated into different parts of the lungs, but was accumulated in greatest quantity near the roots. At the end of the first day the injected patch could be readily distinguished from the other portions of the lung by a well-defined difference in color, which, however, became fainter on the third day, and generally ceased to exist on the eighth day. In no case were fibrinous coagula found obstructing the bronchial tubes. In dogs killed in from two to three hours after the experiment, the microscope showed the presence in the alveoli, containing blood, of some pale cells, two or three times as large as the blood-corpuscles, and having a nucleus and opaque somewhat granular contents. Twenty-four hours later, these cells, which varied in size from 0.006 to 0.015 mm., had become more numerous; their nucleus was less distinct, and their contents were more opaque. The cells continued to increase in number until the fifth day, when they also attained their maximum size (0.021 to 0.024 mm.) Occasionally Dr. Sommerbrodt has discovered within them corpuscular elements, which he has no doubt are blood-corpuscles, not only because they resemble the corpuscles, lying free in the alveoli, but also because they are not stained by carmine as are the nucleus and nucleolus. He thinks, therefore, that they have penetrated into these cells. In animals killed after the seventh day, the cells were found to have become less round, to have a tendency to become crenated and more opaque, and to decrease in numbers. Dr. Sommerbrodt has no doubt that these cells take their origin from the walls of the alveoli, and has been able not only to trace the gradations from the healthy cell to those just described, but also to detect the points from which they have been thrown off. These appearances he attributes to catarrhal pneumonia, and he therefore asserts that blood is capable of exciting this form of inflammation; but, having never been able to discover thrombi in the minute bronchial tubes, he rejects the explanation of Niemeyer, believing that blood exercises a directly irritating effect upon the alveoli.

Alleged Death from Nitrous Oxide.

The alleged death of Mrs. O'Shaughnessy, in Brooklyn, N. Y., from nitrous oxide, is reviewed by Mr. COLTON, in the *American Journal of Dental Science*, for June, with the following results:—

There are three facts with this death to be noted:

1st. The lady had her teeth extracted while *not* under the influence, and during the operation fainted.

2d. The nervous system received more or less of a shock from the pain of extraction.

3d. The lungs were found in a state of asphyxia.

There are three answers to these facts:

1st. Had the lady properly inhaled the gas *she could not have fainted*, because the gas, instead of arresting, increases the circulation.

2d. She would have experienced no pain, and, of course, no shock to the system.

3d. There would have been no asphyxia, as the gas, containing as it does more oxygen than the air, rapidly oxygenizes the blood, and *prevents* asphyxia or congestion. The ablest medical authorities on nitrous oxide recommend that when asphyxia is threatened from any cause, the gas should be administered, as the quickest and most effectual remedy. Indeed, one of the most distinguished professors of chemistry in our city maintains that a law should be passed compelling dentists and surgeons, when administering *chloroform*, to have some nitrous oxide gas on hand, to restore the patient in case asphyxia or congestion is threatened.

"I do not mean to intimate that caution and care should not be exercised to make

pure gas, and to administer it properly; but there was no evidence presented in this case to show that Dr. Newbrough was at fault in these respects.

"In view of these facts, I cannot conceive how the jury could form an 'opinion' that this 'death from asphyxia' was 'induced by the inhalation of gas administered.' Now, in point of fact, the amount of gas previously inhaled, according to all the testimony on the subject, was not sufficient to produce any appreciable effect on the system; consequently there was no *evidence* to justify the 'opinion' arrived at by the jury."

Character of Pure Musk.

In the *Vierteljahrschrift fur Pharmacie*, CHR. KUNRZ states that experienced druggists have changed their view regarding the superiority of the musk in the musk bag, as compared with that sold out of it; he declares himself in favor of that assumption, for the reason that far more numerous modes of adulteration are not only liable, but actually recognized as being practiced in the first instance, than the last would permit without showing more or less the signs of a fraudulent nature. He describes in detail the reactions and the properties of a genuine musk, as regarded by others, as well as his own results. The observations during his comparative investigation induce him to deplore the frequent unreliabilities of statements concerning the exactness of even important drugs like musk; a fact which he ascribes quite properly to the wide-spread practice of copying previous statements for generations without any basis for a judicious selection on the part of the compiler.

Dry Gangrene following the Use of Carbolic Acid.

M. PONCET, an *interne* of the Lyons Hospitals, records in the *Bulletin de Therapeutique* (July 30th) a case which he considers rightly to convey a caution against the rash use of carbolic acid by non-professional persons. A girl, aged 13, had her fore-finger injured by a splinter of wood, which penetrated under the nail. The end of the finger was dipped in a bottle of solution of carbolic acid, and a compress soaked in the acid was applied. The next day the part had a greyish color, and was insensible; and when M. Ollier first saw her, a week afterwards, mortification had extended as far as the upper third of the second phalanx, and a line of demarcation was being formed. The finger assumed a mummified appearance, and separated on the thirty-fifth day. This occurrence suggested to M. Ollier the possibility of amputating fingers and toes by means of the application of carbolic acid; and experiments were accordingly made by M. Viennois on rabbits and fowls. The results showed that the application of carbolic acid was liable to be followed by toxic symptoms; but that these might be prevented by the application of a ligature. M. Ollier endeavored to put the plan into execution in a case of disease of the great toe, by plunging it for some minutes in a concentrated solution of carbolic acid; the thickness of the epidermis, however, prevented mortification from being produced. M. Poncet records also the case of a man, aged 23, who, having wounded the end of one of his fingers, applied for ten days charpie impregnated with carbolic acid, and afterwards poultices. When he applied to M. Ollier, two months after the accident, the terminal phalanx was in a state of dry gangrene, and was removed a few days afterwards.

Three Cases of Epilepsy.

Dr. L. P. YANDELL, Jr., reported to the College of Physicians and Surgeons the following cases, the first of which possesses unusual interest as having resisted the action of the bromide of potassium alone, but was rapidly benefited and finally relieved by the addition of the sulphate of atropia to the prescription.

Case I. A girl, aged thirteen years, small, delicate, precocious, has had since early childhood excruciating headaches, attended by vomiting, double vision, and sometimes loss of consciousness and delirium, and always sending her to bed for a day or more. The seizures were sometimes excited by undue heat or cold, excesses in eating or exercise, malarial trouble or menstrual derangement. She had been treated by bromide of potassium in full doses for many months without relief. When patient came under Dr. Y.'s care he gave her from twenty to sixty grains of the bromide three times daily, and one-hundredth of a grain of the sulphate of atropia night and morning. The attacks soon became less frequent and less severe, and in seven months she seemed rid of them altogether. She was directed, however, to continue the medicine for twelve months more. The patient has of late had several attacks of genuine hemicrania, which were entirely rebellious to the bromide and atropia, but which promptly disappeared under quinine.

Case II. A young farmer, whose father, a confirmed epileptic, died hemiplegic and insane, had many convulsions during infancy and early childhood. Just after reaching puberty he had, while working in the hot sun, his first epileptic seizure. Has had attacks for four years pretty regularly every month, sometimes oftener. A course of bromide of potassium and sulphate of atropia, with strict attention to all his habits of life, have now averted a paroxysm for upwards of a year. He takes the medicines still, though in diminished doses.

Case III. A Swede, aged twenty-seven, an epileptic since early youth, having attacks almost every month, was usually warned of the approach of the seizures by a distinct aura beginning in one hand. He was not unfrequently able to avert the attack by clinching the fist of this side with all his force, or laying violent hold on some hard substance, as a table or chair. The same

treatment pursued in the previous cases materially improved the patient, and gave decided promise of curing him, when he left the hospital, and has not since been heard from. Dr. Y. has come to regard epilepsy as curable in the large majority of cases by the bromide of potassium and sulphate of atropia.

Reviews and Book Notices.

NOTES ON BOOKS.

An annual compend of medical science has been published in Barcelona, under the title of *El Relampago Medico: Anuario de Medicina, Cirugia, Farmacia, y Ciencias Naturales.* It is edited by Dr. Marsillach y Parera, physician to the Santa Cruz Hospital, in the above-named city. The object of the work is the same as that of the Retrospects published in this country, that of affording to the profession an epitome of the latest essays on medical science and practice. The selections are made from various sources, British, French, German, Spanish, and American.

——Among the more recent French medical publications we note a choice collection of ancient syphilographers, especially the works of Jean de Vigo. It is entitled:—*Le Mal Francais*, 1514; *traduction et commentaires par Alfred Fournier, professeur agrege de la Faculte de medecine de Paris.*

——Translations of Prof. F. Rizzoli's *Clinique Chirurgicale*, and of Prof. Carl Binz' work on Materia Medica and Therapeutics, the former from the Italian, the latter from the German, are also announced as ready.

——Dr. Felix von Niemeyer's large and valuable library has, since his death, been bought by Albert Moser, of Tubingen, a bookseller, who has carefully catalogued it, classifying it under the same headings as Niemeyer's *Practice.* The catalogue contains 200 pages, and can be obtained from L. W. Schmidt, German bookseller, 24 Barclay street, New York City.

BOOK NOTICES.

On the Functional Diseases of the Renal, Urinary, and Reproductive Organs, with a General Review of Urinary Pathology. By D. Campbell Black, M. D., L. R. C. S. Ed'n., etc. Philadelphia: Lindsay & Blakiston, 1872. 1 vol., cloth, 8vo, pp. 300. Price $2.50.

The earlier half of this work is taken up with a study of the secretion of urine, with special reference to suppression and retention; the latter half with nocturnal enuresis and spermatic incontinence, spermatorrhea, or, as the author calls it, spermatorrhagia. On the last mentioned topic he is quite expressive, attacking those who disagree with him with unnecessary and absurd bitterness. For instance, page 183, he denounces the theory of the absorption of semen, and adds: "Ten chances to one, he who advocates it is either a fool or an impostor." Such language is grossly unbecoming a scientific writer. On the next page he says that the belief that a single man can by chastity and purity overcome his natural tendency to illicit copulation is "the milk-and-water philosophy of a very weak section of humanity."

It is but consistent with such views for him to deny that religious training is an aid to continence. This he calls "unmitigated cant, of the most detestable description," p. 253; and, indeed, he bursts out into quite magnificent rhetorical exclamation when he contemplates the folly of those who would attempt to do away with the traffic in human life and soul. He cries (p. 251):—

"Suppress prostitution! Turn the Mississippi! Pluck Jupiter from the studded vault of heaven! The canker is in society. Prostitution is an appendage of an advanced civilization," etc.

While, of course, very severe on the "indecencies" of other writers, Dr. Black does not stick at a trifle himself, as witness the piquant anecdote of the Greek courtesan, Archidice, narrated on page 187, which has not the slightest value as an illustration of any scientific fact. His lordly contempt, expressed in the Preface, of what critics may say about his book, possibly arises from some premonition of what their verdict would be likely to be.

We had marked several other passages which deserve to be pointed out as quite as feeble in argument as they are bold in assertion; but we have said enough to show we do not place the book very high on the list of authorities. Nevertheless, the earlier chapters have a good many points of practical utility in them, and in a large measure redeem the book.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SEPT. 28, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

FORCE, LIFE, AND DEITY.

The criticisms we ventured upon, a month or so ago, in these pages, on the theory of the correlation and conservation of force, pointing out what we conceived to be some dubious or at least obscure points in that favorite doctrine of the day, called down upon us some severe remarks from a correspondent. We did not publish them, as the author did not intend them for publication; but a careful reading failed to show us wherein we had erred.

On the contrary, we are sure that there is too exclusive attention given by this correspondent, as well as very many others with him, to the merely material and superficial view of the relation of motion to force, and force to mind. Our own position, and this error which we here again advert to, are so admirably summed up by the venerable and distinguished Dr. CARPENTER, in his recent address as President of the British Association for the Advancement of Science, that we shall make an abstract of part of it.

After explaining the distinctive features of the two schools of thought which attribute our primary beliefs respectively to intuition and experience, and pointing out how they might be harmonized by the theory of inheritance, an opinion in which he said Mr. MILL, to a great extent, concurred, having dealt at some detail with our notions of matter and space as sense-perceptions, the President passed to the consideration of the general conceptions to which experience gives rise—the laws of nature—in the following terms:—

"Now since it is universally admitted that our notion of the external world would be not only incomplete, but erroneous, if our visual perceptions were not supplemented by our tactile, so, as it seems to me, our interpretation of the phenomena of the universe must be very inadequate if we do not mentally co-ordinate the idea of force with that of motion, and recognize it as the 'efficient cause' of those phenomena—the 'material conditions' constituting (to use the old scholastic term) only their 'formal cause.' And I lay the greater stress on this point because the mechanical philosophy of the present day tends more and more to express itself in terms of motion rather than in terms of force; to become kinetics instead of dynamics. Thus from whatever side we look at this question—whether the common sense of mankind, the logical analysis of the relation between cause and effect, or the study of the working of our own intellects in the interpretation of nature—we seem led to the same conclusion, that the notion of force is one of those elementary forms of thought with which we can no more dispense than we can with the notion of space or of succession."

He illustrated this by comparing Kepler's discovery of the three laws of planetary motion—isolated facts, true as far as observed—with Newton's deductions of the laws of gravity, which at once proved and explained Kepler's laws. But even here we may not have reached solid ground. That such laws are absolutely without exception we have no warranty.

Hence from our study of the mode in which we arrive at those conceptions of

the orderly sequence observable in the phenomena of Nature which we call "laws," we are led to the conclusion that they are human conceptions, subject to human fallibility, and that they may or may not express the ideas of the great Author of Nature. To set up these laws as self-acting, and as either excluding or rendering unnecessary the power which alone can give them effect, appears to us as arrogant as it is unphilosophical. To speak of any law as "regulating" or "governing" phenomena is only permissible on the assumption that the law is the expression of the *modus operandi* of a governing power.

The speaker eloquently concluded:—

"Thus we are led to the culminating point of man's intellectual interpretation of Nature—his recognition of the unity of the power of which her phenomena are the diversified manifestations. Towards this point all scientific inquiry now tends. The convertibility of the physical forces, the correlation of these with the vital, and the intimacy of that nexus between mental and bodily activity, which, explain it as we may, cannot be denied, all lead upward towards one and the same conclusion, and the pyramid of which that philosophical conclusion is the apex has its foundation in the primitive instincts of humanity. By our own remote progenitors, as by the untutored savage of the present day, every change in which human agency was not apparent was referred to a particular animating intelligence. And thus they attributed not only the movements of the heavenly bodies, but all the phenomena of Nature, each to its own deity. These deities were invested with more than human power; but they were also supposed capable of human passions, and subject to human capriciousness. As the uniformities of Nature came to be more distinctly recognized, some of these deities were invested with a dominant control, while others were supposed to be their subordinate ministers. A serene majesty was attributed to the greater gods who sit above the clouds; whilst their inferiors might 'come down to earth in the likeness of men.' With the growth of the scientific study of Nature the conception of its harmony and unity gained ever-increasing strength. And so among the most enlightened of the Greek and Roman philosopers we find a distinct recognition of the idea of the unity of the directing mind from which the order of Nature proceeds; for they obviously believed that, as our modern poet has expressed it,

> "'All are but parts of one stupendous whole,
> Whose body Nature is, and God the soul.'

The science of modern times, however, has taken a more special direction. Fixing its attention exclusively on the order of Nature, it has separated itself wholly from theology, whose function is to seek after its cause. In this Science is fully justified, alike by the entire independence of its objects and by the historical fact that it has been continually hampered and impeded in its search for the truth as it is in Nature by the restraints which theologians have attempted to impose upon its inquiries. But when Science, passing beyond its own limits, assumes to take the place of theology, and sets up its own conception of the order of Nature as a sufficient account of its cause, it is invading a province of thought to which it has no claim, and, not unreasonably, provokes the hostility of those who ought to be its best friends. For whilst the deep-seated instincts of humanity and the profoundest researches of philosophy alike point to mind as the one and only source of power, it is the high prerogative of Science to demonstrate the unity of the power which is operating through the limitless extent and variety of the universe, and to trace its continuity through the vast series of ages that have been occupied in its evolution."

Similar topics occupied a part of the time of the last meeting of the German Medical Association, at Leipzig. Professor PREYER, of Jena, delivered an address on the Investigation of Life, in which he contended that the "mechanical" explanation of life was the one that investigators could pursue to most purpose. Among the addresses at the other general meetings was one by Professor DUBOIS-REYMOND, on the Limits of Scientific Inquiry, in which he concluded that the human mind would never come to understand the essential nature (*das Wesen*) of matter and force, nor of consciousness.

MURDER AS A FINE ART.

One of De Quincey's most finished and characteristic essays bears the whimsical title which we have prefixed to this article. With the professed admiration of a *dilettante* he describes the combination of boldness, skill, and delicacy, with which some of the heroes of the Newgate Calendar did their "little jobs" some thirty or forty years ago.

But those brilliant performers, however eminent in the devices of their day, were in the primitive and early ages of artistic and elegant assassination. We surpass them as much in our day in this as in the facility of transportation or communication.

Our readers have noted, within a year, three alleged murders, or series of murders, of the most striking characteristics, in each of which the deeds were asserted to have been perpetrated by the employment of concentrated vegetable or chemical poisons. Dr. Schoeppe was accused of the murder of Miss Steinnecke with hydrocyanic acid; Mrs. Wharton used, according to her accusers, tartar emetic; Dr. Medlicott, atropia and morphia. The accused have all been acquitted, and we hope correctly. But what must startle every reader, even the most indifferent, in perusing the reports of these trials, is the utter and irreconcilable discrepancy which appears in the medical testimony in all of them. The most expert specialists were placed on the stand, and contradicted each other flatly. Processes detailed by the one side as positive and final in proving the presence or absence of the poisons in question, were derided and pronounced futile and useless by the other. Symptoms and conditions asserted by the one set of medical witnesses to point unmistakably to a poisonous agent, were explained by other physicians of equal reputation to be well-recognized appearances of familiar diseases.

From this conflict and contradiction, what conclusion can be derived? This, assuredly, and this only: that there are many poisons which *cannot* be so positively detected by the symptoms they produce during life, or the marks of their presence after death, that a jury can bring in a verdict of guilty on evidence of this character alone.

Let the murderer succeed in destroying the evidence that he possessed such poisons, and collateral proof of that nature, and it seems he can, without much fear of doctors or chemists before his eyes, administer his fatal draught, call in the family physician, and calmly abide the result. Why, if this continues, we shall drift back to imitate the days of the Marchioness of Brinvilliers, and the famous *poudres de succession*, sold as a certain means of giving heirs early possession of their paternal estates.

Fortunately, much of this uncertainty, we believe, is attributable to the custom of *partisan witnesses*, a usage that should be early and forever abolished.

Notes and Comments.

Pregnancy in a Woman Fifty-one Years Old.

Dr. ANDERSON, of Louisville, Kentucky, mentions the case of a woman, aged fifty-one, who was delivered at full term one morning, by a midwife, of a still-born child. The placenta remained. The next day, at noon, he saw the patient, when he found the uterus well contracted, os dilated, and a small portion of the placenta and the cord protruding. There had been no hemorrhage. On introducing his hand he discovered the upper part of the placenta firmly adherent, while that nearest the os was detached, and rolled on itself. With a little manipulation he removed the entire mass. The patient made a good recovery. She had given birth to a living child seven years before. Since that time she had menstruated irregularly. She was exceedingly thin, and her hair was white. Some months before her last confinement she had consulted Dr. A. about an enlargement of her abdomen, which she thought was dropsical. On examination he heard the sounds of the fœtal heart. The patient had never for a moment suspected pregnancy. Dr. A. wished to inquire of the

Fellows whether they had met with pregnancy in persons of his patient's age, or older?

Dr. Speed stated that he was once called to see a lady fifty-three years of age, whose youngest child was nine years old. She had been visited twice that day by a physician of Louisville, now dead, who had given paregoric for what he said was belly-ache. Dr. S. found the patient in labor, which ended safely to both mother and child. The woman declared she had no thought of being pregnant.

Ozone in the Atmosphere.

M. HOUZEAU, an eminent member of the Academy of Rouen, has introduced a novel method for the production and test of ozone. He obtains the ozone by the action of hydrochloric acid on binoxide of barium. He has found that paper rose-colored by litmus, and coated in part with iodide of potassium, was not acted upon by these substances, other than ozone, which affect the iodide of potassium. With this test he found that odorous oxygen (ozone) exists in country air in its normal state, reaching, at its maximum, the proportion of 1-140,000. Ozone may be found in small towns, but is almost entirely absent from great centres of population. In spring it appears very abundant; in winter it shows very little action. From violent motion of the atmosphere during storms, ozone accumulates to a prodigious extent. The Rouen chemist has obtained in a litre of common oxygen from 60 to 120 milligrammes of odorous oxygen. In such proportion ozone has no longer those beneficial effects which are seen in nature to result from its distribution; when concentrated it is dangerous for respiration, burns the organic tissues, blackens and corrodes silver, and has even greater discoloring power than chlorine. On contact with it a mixture of equal parts of phosphoretted hydrogen and oxygen explodes with violence.

Calabar Beans for Constipation.

Calabar beans have, until lately, been but little used, except for contracting the pupil of the eye, and by Dr. OGLE in chorea. Dr. VICTOR SUBBOTIN, in the *Deutsch Archiv. Klin. Med.*, proposes Calabar beans for atony of the bowels, observing that it has been found by BAUER, and confirmed by A. V. BESOLD and others, that this drug produces a cramp-like condition in organs that are supplied with involuntary muscular fibres.

He uses the preparation in the following form:

℞. Ext. sem. physostig. ven., grs. iv.;
Glycerin. puri, ʒij.
Solve. sig. Four times a day, four drops.

He first administered this solution to a female who was much constipated from atony of the bowels. After the patient had used this preparation twice, a swelling in the abdomen, caused by fæcal matter, disappeared permanently, and the patient was cured. Her constipation had, however, once already disappeared, temporarily, by the use of aloes and rhubarb. Dr. SUBBOTIN has since treated two cases of atony of the bowels and one case of chronic bronchial catarrh (atonic state of the bronchial walls) most successfully with the Calabar beans.

Excision of the Mamma for Cancer.

Dr. HARDIE advocated, at the Manchester Medical Society, particularly, incisions well free from diseased tissue, the removal of axillary glands beyond those affected, and prompt interference in the case of a return of the disease should it be within reach. With such precautions, he believed, this operation would be much more successful than it generally is. He showed two cases. One had been operated on four years ago; in this case the disease returned in the axilla three months afterwards, and a second operation was performed. The other was operated on two years ago, and there had been no return. Both patients were now in excellent health, with soft movable cicatrices, and no appearance of return of disease.

Small-pox at Shamokin.

Dr. C. W. WEAVER writes us:—"We have had about 500 cases of small-pox here, 100 of which have proved fatal. Successful vaccination with humanized virus is entirely protective in all cases; but a great many of our people will not be vaccinated, and they are the ones that get the disease. Had Governor Geary's recommendation to the Legislature, to make vaccination compulsory, been carried into effect, those 100 lives in Shamokin would not have been lost. Has not the medical profession of Pennsylvania influence enough, if concentrated, to bring about such legislation?"

Statistics of the Profession in France.

Dr. REVILLOUT, writing in the *Gazette des Hopitaux*, calls attention to some statistics published by the French Minister of Public Instruction. Among other matters, there are tables giving, for each department, the number of physicians and *officiers de sante* in 1847, 1853, 1857, and 1866. In 1866, there were 11,643 doctors of medicine, being 1000 more than in 1847; while the number of *officiers de sante* was 5697, the decrease, as compared with 1847, being 2145. There was thus a total decrease of 1145 medical practitioners, notwithstanding that the population had increased from thirty-four and a half millions to nearly thirty-eight millions. M. REVILLOUT attributes this falling off in great measure to the defective encouragement afforded by the State to high-class education.

Determination of Sugar in Urine.

Prof. SEAGEN says: The following conclusions are deduced from a series of experiments:

1. There is no reliable reagent known which proves the presence of very small quantities of sugar in the urine as certain.

2. The presence of but small quantities of sugar in the urine, in case of many pathological and physiological conditions, cannot be proved beyond a doubt.

3. Normal urine does not contain sugar in such quantities as would enable the chemist to prove its presence.

4. Normal urine contains small quantities of a substance which reduces copper. To prove that a portion of it is sugar is impossible with our present means.

Antagonism of Strychnia and Chloral.

M. RABUTEAU, at a sitting of the Société de Biologie, denied the alleged antagonism in the action of chloral and strychnine, asserted recently by various writers, which has been much discussed. His experiments lead him to opposite conclusions. Moreover, he considers that the experiments of M. PERSONNE place it beyond doubt that chloral, administered in small doses, acts like chloroform administered in a continuous manner. In a large dose, there is a transformation of a part of the chloral; the other acts by its own properties. We have, then, to do with a poison which would add its effects to those of the strychnine, if the latter had been previously injected.

Chloralum and Chloralum Preparations as Disinfectants.

According to the results of different analyses, these articles derive their origin from a clay containing iron and lime, which is treated with hydrochloric acid; the solution as well as the dried residue are sold for disinfecting purposes, but have only a trifling value except as deodorants.

CORRESPONDENCE.

Polypus Uteri—Importance of a Correct Diagnosis.

EDS. MED. AND SURG. REPORTER:

I send you a history of a case that I deem of sufficient importance to report through the columns of the MEDICAL AND SURGICAL REPORTER.

Mrs. Sarah Brayford, aged about 27 years, married, one child, robust, with plethoric habit. About four years since was attacked with pains resembling those of labor, during her menstrual flow, which lasted for a period of two weeks, recurring again at the end of three weeks, or, in other words, she became unwell every three weeks, with pain, etc. She was prevailed upon, after a lapse of about six months, to consult Dr. G. F. B., who pronounced the case one of simple menorrhagia, with prolapsus uteri. At his second visit he inserted the ordinary glass pessary, which remained until her next monthly period, when flooding was so great that they sent for the doctor again; it being in the night he would not go until the next day, whereupon the services of an old woman were brought into play, who removed the pessary, and in doing so discovered that there was something hanging in the vagina, attached to the womb, which fact was communicated to the doctor, who persisted that it was simply prolapsus. Not satisfied with the treatment, Dr. B. was discharged, and Dr. W. called, who examined, and pronounced it the result of a cold, which he could cure within three months; after one year's trial he was discharged, and Dr. No. 3 was called. He promised a sure cure; after examination he pronounced it, like Dr. No. 2, the result of a cold and weakness, but the others had not given the right medicine, and nobody but himself knew what the right medicine was. One year's trial was allotted to him, but like his predecessors, he was no more in luck or

success. He was discharged, and Dr. H., or No. 4, was called, who went through the regular routine of questioning, digital and instrumental examinations, and pronounced it prolapsus, with ulceration of the os externum, whereupon he ordered vaginal injections of argenti nitras, external support, internal support, a baby, etc.

Thus it went on for over one year; occasional examinations were made. Unfortunately, the baby clause was not one of the possibilites in this case.

On Wednesday, the 18th of September, she was taken with tremendous flooding, which was only checked by the timely calling of my friend, Dr. P. A. B., who found her in a state of syncope, pulseless, etc.; stimulants were given at once, together with the vin. ergota, which controlled the hemorrhage. I was invited by the doctor to see her in the evening, who had pronounced the case a polypus of the uterus, its attachment being at the os internum. He requested me to assist in the removal, which was done the next day, bringing away a tumor the size of a large teacup, fibroid in its character. The operation was performed by seizing the neck of the tumor with a long pair of forceps, and removing it with a clean cut; to the stump a pledget of lint, saturated with liq. ferri subsulph., was placed so that it could be easily withdrawn by the means of a thread. The operation did not necessitate the patient to confinement to the bed but three days, and on the fourth she was able to be about the house.

We find here a case of four years' standing, which was diagnosed by an old woman; the physicians were informed, yet they failed to recognize the trouble after being informed of the fact. She was treated by three physicians of the regular school, but they made precisely the same mistake that was made by the quack. Why is it that physicians who are possessed of ordinary intelligence mistake a case where the diagnostic signs are so plain that an old woman can make them out? When will physicians learn to be careful in their opinions, and when there is an obstinate case call in counsel, and, if in error, try to correct it, not have their names heralded forth by an ignorant community, bringing disgrace, not only upon themselves, but the profession at large.

Respectfully,

PHILIP WEBER, M. D.,

Sept. 24, 1872. *Pennsylvania.*

Reply to the Communication of Dr. C. F. Perkins on Temperance.

EDS. MED. AND SURG. REPORTER:—

Dr. C. F. PERKINS, in a recent number of the REPORTER, has given a definition of Temperance, and a brief history of the efforts made during the last fifty years to diminish the use of intoxicating liquors. While to a great extent I think his statements correct, there are some points in the article to which I wish to take exception.

Regarding the work described by him as having been performed by Drs. RUSH and BEECHER, and the Washingtonian Society, I will have nothing to say at present. I agree with the Doctor in his description of the magnitude of the evil. Intemperance, truly, "like an undying monster, is gnawing at the vitals, and corrupting the life's blood of the noblest, purest, and fairest of earth," and hurrying to untimely graves tens of thousands of the citizens of our own country. I do not believe, however, that the advocacy or practice of *his* principles is going to accomplish much toward arresting this mighty flood.

Every person who will give the subject a thoughtful consideration, and carefully observe its workings, I think, can arrive at no other conclusion than that the only hope of salvation for those who are slaves of the intoxicating cup is not in moderation or temperance, but in *total abstinence.* If they would become reformed men, they *must abstain.* The object to be accomplished is to destroy the appetite for alcoholic liquors, and how can this be done if they continue to indulge this abnormal desire, though it be only occasionally and moderately? Will it not, on the contrary, be speedily aroused in all its former fury? Certainly! Reason itself teaches us that the only safe practice is total abstinence.

But what to me is most surprising, and quite ridiculous and presumptuous, is that the Doctor should boldly assert that the Divine Scriptures sanction the use of alcoholic liquors as a beverage. The idea of the Word of God advocating the use of an article that is fraught with naught but misery and sorrow, that is detrimental to the interests of humanity in both a temporal and spiritual sense, is so preposterous that I cannot for a moment entertain the thought. I contend that the Bible nowhere sanctions its use. I do not think that he

can point to a passage, anywhere, where its use as a beverage is either directly or indirectly encouraged. It is true that the use of wines is in some instances approved of; but I have no idea that those of a *fermented* character are referred to. Both fermented and unfermented wines are spoken of in the Bible. That referred to approvingly is doubtless of the former character; while the latter is most emphatically condemned, as will be seen in the following passages: "Wine is a mocker, strong drink is raging; and whosoever is deceived thereby is not wise." "Look not thou upon the wine when it is red, when it giveth his color in the cup, when it moveth itself aright; at the last it biteth like a serpent, and stingeth like an adder."

I proceed next to speak of the advisability or value of the Total Abstinence Pledge. In regard to this, the Doctor propounds the following question: "Is it not rather a sandy foundation?" I propose to answer this negatively. I believe that total abstinence is the only safe and successful rule, and I believe also that the pledge is the most effectual mode ever devised to assist in carrying out in the life its principles. It is a corner-stone on which have been erected many permanent superstructures; it is a foundation upon which many have built and been secure; even amidst the severest temptations they have been enabled to stand. Thousands of reformed men refer with pride and gratification to-day to the hour when they had the moral courage to take the pledge, and attribute their successful reformation to that act. I cannot agree with the Doctor, that "amidst the flourish of pledges manhood is scarcely considered," or that "it is an evil to be trammeled with pledges and promises made in earlier or later life." Take, for example, a man who has for years been addicted to strong drink, whose appetite has long been pampered, who has such insatiable desires for stimulating liquors that he does not pass a single day without gratifying that appetite; which would be considered the noblest exhibition of manhood in him, by every considerate person, by every lover of humanity—even though pledges were flourished on every hand, and he was urged by an affectionate wife and loving children, though friends should join in the entreaty, and every means possible be brought into requisition to induce him to sign the pledge—which, I repeat, would exhibit the higher degree of manhood in him, to take the pen and ink and sign a life-long total abstinence pledge from all intoxicating liquors, or to defiantly spurn the pledge and reject the earnest entreaties of loved ones, and allow his power of appetite to so control and fascinate him as to be unwilling or unable to sever the force that held him to the intoxicating cup? Let the reader answer this in his own mind.

The Doctor seems to dislike the binding effect of the pledge; now I look upon this as being its most valuable quality; its binding force follows us wherever we may go; though separated far from friends and those by whom we were surrounded when taking it, it still stares us in the face, and when, perchance, we are importuned to indulge in alcoholic drinks, the first thought that rushes to the mind is, I cannot, my pledge will not permit it.

I cannot conceive in what manner the pledge can cause uneasiness; if we are men of true principle we will not indulge the thought of violating it; though a suggestion of that kind may arise in the mind it will be unheeded, while in the course of time our principles will become so fixed that we will scarcely realize that we are bound by it.

The query frequently arises in my mind, why is it that men are so opposed to the Total Abstinence Pledge, while pledges in general are not looked upon as of so despicable a character. When the youthful bride and groom are about to be united in the bonds of matrimony, and are desired to pledge fidelity each to the other for life, no one is heard to raise objections, or warn them against being thus trammeled by a pledge, telling them they will be unhappy under restraint of that kind. And yet the pledge in the subject under consideration is just as reasonable and proper as in the case just referred to.

In concluding this communication I would urge upon my brethren and friends of the medical profession the importance of giving this subject their earnest consideration and attention. The monster intemperance is lifting its hoary head everywhere throughout this glorious land of ours; it is sapping the very life of the nation, and is weakening the intellectual and moral powers of her best citizens. And shall we, the members of the noblest and most philanthropic of the learned professions, remain unmoved, and

fail to exert the influence that our position gives us?

L. B. KLINE, M. D.

Catawissa, Pa., Sept. 20, 1872.

NEWS AND MISCELLANY.

Edward Parrish—Report of the Alumni Committee on Memorial.

An adjourned meeting of the Alumni Association and graduates generally of the Philadelphia College of Pharmacy was held last week in the hall of the college. Mr. C. L. Eberle occupied the chair.

The committee appointed on the 17th instant to draft resolutions reported as follows:—

At a meeting of the Alumni Association and graduates of the Philadelphia College of Pharmacy, held September 17, 1872, the following memorial, expressive of our sad bereavement in the death of Professor Edward Parrish, was directed to be presented to the family of our beloved friend and teacher, towards whom our hearts are drawn in tender sympathy, who have been so suddenly bereft of their life-long companion and friend, and are stricken with a grief too full for utterance and almost overwhelming. We feel that there is not one here in this meeting, of those who have been privileged to sit under his instruction, but who can bear testimony to the great and almost irreparable loss which the profession and general community have sustained, and to the personal sense of a vacancy in the circle of our truest and dearest friends.

To this community in which he has so long labored, and maintained an untarnished reputation, where indelibly are written the marks of his earnestness, integrity, philanthropy and public spirit, his memory will long be green.

The graduates and students of the college will sorely miss their genial, warm-hearted and fatherly teacher, who was so approachable, and so readily entered into sympathy with them in the difficulties that beset their paths.

The profession over this broad land will acknowledge and deplore his loss, and wherever his professional merit has been recognized, or his name introduced, all must unite in regretting the dispensation that has removed him thus early from the field of his usefulness.

But while we thus express our feeling of a common sorrow we have the great consolation of all Christian hearts, to know that he was calmly prepared for and anticipated the sad event, that he was surrounded by those who, while strangers, ministered tenderly to the necessities of his last illness, and, that soothed and sustained by an unfaltering trust, he approached his God "Like one that draws the drapery of his couch about him, and lies down to pleasant dreams."

The above paper was unanimously adopted.

Harlem, N. Y., Medical Association.

The Harlem Medical Association held their regular monthly meeting at the residence of Ira B. Read, M. D., last Wednesday evening. It was organized Aug. 6th, 1869, and has a membership of about twenty-five. The officers are, J. O. Farrington, M. D., President; A. D. Rockwell, M. D., Vice President; H. G. Forbes, M. D., Secretary; M. McLean, M. D., Treasurer; and John Shrady, M. D., H. L. Sheldon, M. D., and H. H. Gregory, M. D., Trustees.

Their plans for popularizing sanitary knowledge this fall and winter, if formed, have not been made public.

The American Public Health Association.

A large number of medical and other scientific men have organized as the American Public Health Association, with Stephen Smith, of New York, President; Edwin M. Snow, of Providence, First Vice, and C. B. White, of New Orleans, Second Vice President; John H. Rauch, of Chicago, Treasurer; Elisha Harris, of New York, Secretary; Francis Bacon, of New Haven, William Clendenin, of Cincinnati, C. C. Cox, of Washington, Henry Hartshorne, of Philadelphia, Moreau Morris, of New York, and John M. Woodworth, of Washington, Executive committee. Various important subjects are referred to special committees. The present number of members is ninety-five, all well-known workers in the field of sanitary improvement in the cities of the United States and Canada. The next meeting will be at Washington in the last week in February.

Valuable Invention.

A new industrial art, under the name of "helioautographic printing," is now attracting attention in Paris. The process is said to enable an artist to make his own designs and drawings, to print from them upon photographic paper, and reproduce the same upon lithographic stone, so as to obtain impressions of his own work, in the minutest details, independent of the engraver or lithographic draughtsman. This will be of great value in scientific researches.

The Ruth Murder—Dr. Medlicott Released.

Dr. Medlicott, arrested about eighteen months ago for the alleged murder of a patient, Mr. J. M. Ruth, with a compound of morphia and atropia, has been at last released, the District Attorney having entered a *nolle prosequi*. His case has excited very great attention among toxicologists.

Hail Storm of Salt Pieces.

Müller states that on the 20th of August, 1870, upon the St. Gotthard Mountain, for five minutes a hailstorm happened to fall which consisted of rounded pieces of salt, similar in character to those which are found in North Africa.

Election of Professor.

At a meeting of the Board of Trustees of the Philadelphia College of Pharmacy, Prof. William Procter, Jr., was unanimously elected to the Chair of Pharmacy, made vacant by the death of Prof. E. Parrish. Previous to the election of Prof. E. Parrish, this chair was filled by Prof. Procter for twenty consecutive years.

Official Report on Quarantines.

An act of Congress was passed at the last session directing the detail of one or more medical officers of the Regular Army, during the coming season, to visit each town or port on the coast of the Gulf of Mexico and the Atlantic coast which is subject or liable to invasions of yellow fever, and to confer with the authorities of such port or town with reference to the establishment of a more uniform and effective system of quarantine, and to ascertain all facts having reference to the outbreaks of this disease in such ports or towns, and whether any system of quarantine is likely to be effective in preventing invasions of yellow fever, and, if so, what system will least interfere with the interests of commerce at said ports. They are to make a detailed report on this subject to the Secretary of War, through the Surgeon General, on or before the assembling of the third session of the Forty-second Congress, in December, 1872.

Personal.

England has recently lost two able surgeons, Mr. ALFRED POLAND, F. R. C. S., Surgeon to Guy's Hospital, and FREDERICK C. SKEY, C. B. F. R. S., etc.

Up to the period of his death, Mr. Poland was actively engaged in contributing numerous essays, on special surgical subjects, to the medical press, all bearing marks of great research and erudition combined with much practical skill and forethought. His professional pursuits and success in life were, however, sadly marred by failing health, induced, in the first instance, by purulent infection contracted in his hospital work, a subject on which he treated from personal experience in the article on "Animal Poisons," in Holmes' *System of Surgery*. His susceptibility to repeated attacks, originating, as he believed, from the same cause, disabled him at length from his more active duties; and about five years ago he was reluctantly compelled to relinquish his lectures on surgery, and to devote himself entirely to the work in the wards. During the last two years he had been suffering from chronic catarrh, and was forced, in consequence, to retire to the house of his father, Sir William Poland, of Blackheath.

Mr. Skey was a valuable contributor to the advancement of professional knowledge, and a paper on Muscular Fibre, published in the *Transactions* of the Royal Society, obtained for him the Fellowship. He was the author of works on *The Venereal Disease*, on *Operative Surgery*, and on *Hysteria*. He published also Lectures on the *Prevalent Treatment of Disease*, and on the *Relative Merits of the Two Operations for Stone*. He was also a frequent writer in the medical and other journals. The immediate cause of death was ulceration of the intestines.

The Leipzig Meeting of the German Medical Association.

The Association of German Naturalists and Physicians held its forty-fifth meeting at Leipzig, from the 12th to the 18th of August. The members enrolled amounted to 1277. Three general meetings were held in the new theatre, at which addresses were delivered. The chief address or "Festrede" was given by Professor Ludwig, who reverted to the labors of Oken and Alexander von Humboldt in founding and organizing the Association, and afterwards proceeded to deal with the question whether, through the character of the modern time, through the striving after rapid productiveness and wealth, the pursuit of the ideal and the scientific would be made to cease.

NOTES AND QUERIES.

Extirpation of the Ovaries.

Messrs. Editors:—Is there a single example on record of the extirpation of healthy ovaries in the human female, except that reported by me? If so, when, and where?

Respectfully, P. H. N.

Rome, Georgia.

REPLY.—Certainly; many such cases are on record. It was not unfrequent, in Ancient Greece and Rome, to see "female eunuchs," as they were called. Sir James Y. Simpson considers that they were "castrated" by extirpation of the ovaries, not by the operation on the labia still frequent in Abyssinia. (See his "Works," Vol. iii, p. 484, ed. of 1872.) The eminent Dutch surgeon of the last century, Boerhaave, relates that a case came under his knowledge where a swine-spayer castrated his daughter, in order to put a stop to her licentious practices. Other examples could easily be found.

OBITUARY.

DR. E. PARRISH.—Professor Edward Parrish, M. D., whose death at Fort Sill, Indian Territory, on September 9th, has been announced, was born in Philadelphia in 1822, and was a son of the celebrated Dr. Joseph Parrish. After graduating in medicine he was appointed a professor in the Philadelphia College of Pharmacy, with which institution he has ever since been connected. He was also for a time President of Swarthmore College. Professor Parrish was the author of many medical essays and works, the principal one of which, "Parrish's Pharmacy," has always been considered a standard authority. At the time of his death he was visiting the Western Territories as a Special Peace Commissioner to the Kiowa Indians.

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Original Department.

Communications.

MYALGIA AND ITS TREATMENT.

By J. B. Mattison, M. D.,
Of Chester, N. J.

Myalgia, strictly speaking, is the term applied to those very common and painful affections grouped under the head of muscular rheumatism, and known as lumbago, pleurodyria, and so forth, according to the muscle or muscles affected.

Doubtless, every practitioner is more or less familiar with these troubles, and though some of them may be comparatively trivial, as, for instance, the stiff neck produced by cold, and, being treated with domestic remedies, escape his professional attention, there are others, in which the actual suffering and incapacity for physical labor are so marked and so protracted that it becomes a matter of prime importance to remedy this state of affairs as speedily and effectually as possible.

It is not the purpose of this article to speak of the pathology of this disease, nor of its diagnostic points as compared with neuralgia, both features of marked importance, and for a full consideration of which the reader is referred to Dr. Anstie's admirable treatise on "Neuralgia and its Counterfeits," the latest and best work on the subject, and with which every physician should thoroughly acquaint himself if he be desirous of keeping fully abreast the times in the management of that painful affection.

We desire more particularly, to call attention to a plan of treatment which, in our hands, in *all* cases, has given more prompt and satisfactory results than any other with which we are acquainted, namely, the subcutaneous injection of morphine.

Anstie, in speaking of the treatment of this affection, remarks, that keeping the affected muscle or muscles in a state of full extension, the maintenance of a perpetual local vapor-bath by spongio-piline, and, if necessary, one or two Turkish baths, are all that is required in a very large number of cases. When these measures fail, he recommends the use of scruple or half drachm doses of muriate of ammonia, and adds, that "in the first very acute stage of a severe case it may be advisable to inject morphia hypodermically."

Now, the point we desire to bring prominently forward is, that it is not necessary to wait for a *severe* case, but that in *all* cases where professional assistance is desired the hypodermic employment of morphia, varying the dose according to the intensity of the suffering, and in the milder cases a very small quantity will suffice, affords more decided, and by far more speedy relief than any other mode whatever.

The result in the following cases will fully illustrate the value of this form of medication.

March 13, 1872, was called upon to visit R. P., farmer, æt. 45, whom I found confined to his bed from a severe attack of lumbago of four days' duration. Any attempt to assume an upright position gave rise to the most exquisite suffering, and even when the affected muscles were completely extended and fully at rest there was an intense aching, entirely preventing sleep, and causing much distress.

At the cost of great pain we succeeded in

getting him in a semi-prone position, and injected one-third of a grain morphiæ sulphas over the lumbar region. In seven minutes, *actual time*, patient was free from pain, and expressed himself as feeling perfectly comfortable. Visited him the next day, 12 M. Complete relief, with no unpleasant effect save a slight nausea, had continued for sixteen hours, allowing a night's refreshing slumber, and only returned, very much lessened, about one hour previous to my second visit. Injected one-quarter grain sulphate, and that completed the treatment, as the next day the patient left his bed, and the second day afterwards reported himself in the village three miles distant from his residence. He was most emphatic in his testimony as to the value of the remedy, and declared that after the first injection "he was never so happy in all his life."

H. M., æt. 17, presented himself at the office, complaining of pain in the left side, much increased on full inspiration, and of several weeks' standing. An examination into the history of the case convinced us that it was myalgic, and an injection of gtt. v solut. magend. was followed, in five minutes, by entire relief from pain, *which did not return.*

W. H., æt. 35, applied for the relief of a pain of four months' duration, presenting the following peculiarity: When erect, either sitting or standing, no discomfort was felt, but the moment he bent forward, or elevated his feet above the level of his body, he began to suffer pain in the epigastrium, which constantly increased in severity until it compelled him to resume an upright position. He presented the appearance of purfect health, and a careful examination failed to discover the slightest evidence of gastric derangement. Regarding the case as one of epigastric myalgia, we injected gtt. viij sol. magend. in the affected muscle. Saw the patient some hours after, and he expressed himself very much relieved, only slight pain being felt in any position. Circumstances of a business nature beyond control prevented his following out the plan of treatment, and he passed from under our observation. We have no doubt that the injections, had they been continued, would have resulted in a perfect cure.

Was called to visit Mrs. T., æt. twenty-nine, mother of seven children, the youngest eleven months old. The following is her history. Two weeks subsequent to the birth of her last child she was seized with a severe pain under the left breast, which has occurred at variable intervals ever since. Not a day has passed without more or less distress, so marked at times as to compel her for a while to abandon domestic duties. Her general health seemed good, and were it not for the local suffering she would consider herself a well woman. There was a sense of soreness in the affected region, and the pain seemed to be dependent in a great measure upon muscular action, movements involving the affected part always distinctly aggravating it. Sinapisms and other remedies had been employed without benefit. Considering the case myalgic in its nature, we injected gtt. iv sol. magend. deeply into the substance of the painful part. Called forty-eight hours afterwards and learned the injection gave marked and permanent relief, having felt no pain since its employment, an immunity from suffering she had not enjoyed for nearly a year. Made a second visit some time later, and found the freedom from suffering continued. Meanwhile she had engaged in more than ordinarily severe physical labor without any pain whatever, and having no further occasion for professional services the case was dismissed.

The foregoing are not culled cases. They are given in the order they occurred, and the results in all are, we think, such as to verify the statement made as to the value of the remedy employed.

Some doubts may be expressed as to the correctness of diagnosis in the last mentioned case, from the fact that one injection sufficed for a cure. The absence of any other manifestation of hysteria, past or present, will exclude the so-called "hysterical breast," while the want of any neurotic tendency in the previous history, and the fact that the pain was always distinctly aggravated by muscular movement will, we think, set aside any suspicion as to its neuralgic nature.

While claiming for the subcutaneous employment of morphia the decided preference over other forms of treatment, we by no means deny that cases may occur requiring additional measures. It is pre-eminently in those instances where the affection is strictly local that its curative virtues are so marked. When any evidence of anæmia exists, and the pain seems but part of a general mal-nutrition, tonic remedies, and especially the continued employment of cod-

liver oil, will be quite essential to effect a radical cure.

One point, in particular, we desire should not be overlooked, namely, *deep* injections. Plunging the needle firmly into the substance of the affected muscle gives us the benefit of *acupuncture*, which has been found exceedingly valuable in getting rid of obstinate myalgic pain.

ON TONICS AND THEIR EMPLOYMENT.

By Thomas Barrow, M. D.,
Of Baltimore, Md.

The Tonics are by far the most numerous class of remedial agents.

With the exception of mercurials and alkalies, very nearly all the metallic remedies are tonic. The vegetable bitters and the mineral acids are also decidedly tonic. Physical exercise, pure air, and wholesome food and drink, are tonics of inestimable value. Tonic tinctures are also valuable. The proportion of alcohol (as George B. Wood, M. D., in "U. S. Dispensatory," ed. xii, page 1383, says) is so small as to produce no appreciable effect. Lager beer, however, and other alcoholic potations, when used as tonics, are liable to very grave objections. In states of depression, or too rapid absorption of decomposition, their value cannot properly be denied. Uncomplicated depression, however, may often be removed in a few hours, and even when complicated with fever, etc., they seldom require to be used constantly, but usually only occasionally. To elevate a debilitated person, however, to a condition of strength and energy, usually requires the constant use of the most efficient tonics during three or four weeks.

Lager beer, although I find it not unfrequently prescribed as a tonic, is by no means a very effective one. The chalybeates, strychnia, quinia, columbo, gentian, etc., are far more tonic than the hop. The nutriment contained in malt liquors is infinitesimally diminutive. The world-wide renowned Liebig analyzed a large quantity of the best Bavarian beer, and found that 365 gallons (about eleven barrels) of it contained only as much nutriment as two and one-half pounds of bread.

Not long since, upwards of three hundred London physicians, whilst admitting the usefulness of alcohol as a diffusible stimulant, denounced its being prescribed for habitual use, in consequence of its tendency in this way to form the habit of intemperance, which leads to degradation, wretchedness, and misery, both during the present life and throughout eternity. Some years since, at a very large meeting, in England, of bishops and clergy, who met to consider what were the best means of imbuing the minds of the masses of the people with religious truth, it was unanimously admitted that the extensive prevalence of intemperance obstructed this desirable object more than any other cause whatever.

Liquor dealers, also, cling to their nefarious and destructive business much more tenaciously than formerly, in consequence of some physicians so often prescribing lager beer as a tonic.

Since the objects of medical practice are entirely benign, no physician ought to be willing to occasion present and eternal destruction to his fellow-creatures by leading them into habits of intemperance. Depression and debility are usually intimately connected. Feeble persons are often depressed, while persons in vigorous health are seldom so affected. The best means, therefore, in most cases, to relieve the depression is to remove the debility.

I regard malt liquors, etc., as possessing such feeble tonic powers that I have never prescribed them as tonics in a single instance. No reasonable objection, however, can be made to such preparations as tinct. ferri chlor., tinct. lavandula comp., etc., when used for tonic or corrective purposes.

On visiting Mrs. H. A. Elliott, about twelve years since, I found her almost dead from severe and protracted uterine hemorrhage. She presented all the characteristic features of the Hippocratic face. I asked her why she had not sent for Dr. M——. She replied that she was sure Dr. M—— could not bring her through it, but she was sure that I could, and because that was my day to pass that way, she had waited for me. I prescribed—

℞. Plumbi acetat., gr. xiv.
Opii, gr. vj. M.
Ft. pil. vi.
Dose—One pill every twenty minutes till relieved.

Two of these pills arrested the hemorrhage. I then prescribed—

℞. Tinct. ferri chlor., fl. ℥ij.
Dose 10 drops every two hours.

To relieve dyspnœa, prevent the recurrence of hemorrhage, and in some degree increase

her strength. These anticipations were fully realized. As an additional tonic, and to remove neuralgia, I at another time prescribed—

℞. Ferri subcarb., ℥j.
Ext. belladonnæ, gr. viij.
Pulv. columbo.
Pulv. zingib, aa ℥iv.
Pulv. rhei, ℥ij. M.
Dose—One-quarter teaspoonful three times a day.

Her neuralgia, from which she had suffered severely, was entirely cured within three days, and within two weeks from my first visit she was restored to the enjoyment of complete health. In a previous similar, although less severe case a physician attended her six weeks.

Mrs. Comfort Lefevre had suffered during two years with excessive debility and emaciation, headache, cardial palpitation, and depression, complicated with and aggravated by uterine hemorrhage. She told me that seven physicians had prescribed for her for these complaints, without much benefit. To arrest the hemorrhage, I prescribed—

℞. Acid sulph. arom, fl.℥ij.
Dose—10 drops three times a day.

For the other indications I prescribed—

℞. Ferri redacti, ℥ij.
Ext. gentian.
Quin. sulph., aa ℥j.
Ol. tiglii, gtt. iv. M.
Et ft. pil lxxii.
Dose—1 pill three times a day.

I subsequently modified this latter prescription, thus:—

℞. Ferri redacti, ℥ij.
Ext. gentian, ℥j.
Strychniæ, gr. iv.
Ext. coloc. comp., ℈ij. M.
Use as previously directed by Dr. T. B.

She has repeatedly said she could not live without these pills. For nearly six years she has habitually taken one at night. If omitted a day or two, she feels so badly that she is compelled to use them again.

Mrs. Elizabeth Layton had suffered during two years almost exactly as Mrs. Lefevre, except the hemorrhage. Various prescriptions furnished to her by three physicians had afforded her some relief; but she was entirely and permanently cured within four weeks by means of:

℞. Ferri subcarb., ℥j.
Pulv. columbo.
Pulv. zingib., aa ℥iv.
Pulv. rhei, ℥ij. M.
Dose ¼ teaspoonful 3 times a day in a little molasses and water.

Mrs. Adair had long suffered with general debility, which was aggravated during seven days by severe diarrhœa, with hemorrhagic passages. Of this latter malady she was completely relieved in twenty-four hours by means of:

℞. Pulv. cupri sulph., gr.iij.
Pulv. opii, gr.vj. M.
Et ft. pil. xij.
Dose, one pill every two hours till relieved.

I believe that I also gave her the same tonic mixture which Mrs. Layton had used, with similar effects. About one year afterwards, another attack promptly yielded to the same remedies.

Mr. Baumgardner had suffered during three months from hacking cough, debility, and emaciation. I prescribed:

℞. Syr. senecæ,
Syr. ferri, iodid., aa ℥ij.
Morph. sulph., gr.ij. M.
Dose one-half teaspoonful every three hours.

I also directed him, when the above mixture had been used, to take also the same combination which Mrs. Layton had used. Within one month he was, by these means, completely and permanently cured.

Mr. Wright, during six months, had several pulmonary hemorrhages, with hacking cough, emaciation, and debility. He, also, within one month, was completely and permanently cured by means of the same remedies which Mr. Baumgardner had used.

Mrs. Coppen had suffered during eight months from general debility, depression, palpitation, etc. She was entirely cured within one month by means of the same remedies which Mrs. Layton had used,

Mrs. Lydia Stokley had suffered severely during two years with all the maladies which Mrs. Coppen had complained of, which were complicated with, and aggravated by, prolapsus uteri. For the former, I gave the last prescription which I had given Mrs. Comfort Lefevre, with the addition of morph. sulph., gr.vj. For the prolapsus uteri I prescribed:

℞. Acid tannic, ℥ij.
Pulv. catechu, ℥j.
Butyri cacao, ℥j.
Ol. olivæ, ℥ij. M.
Et ft. pessaries cylindrical, viij, each 1½ inches long. Use one at night, twice a week, as directed by Dr. Thomas Barrow.

The injections and other remedies which had been prescribed for her had effected

but little good. By means of the use of the preceding remedies, she was very much benefited.

Mrs. Sarah Greenfield had suffered for thirteen years with prolapsus uteri, and for about one year with debility, neuralgia, etc. Within one month she was entirely and permanently cured of all these maladies by means of the pessaries which Mrs. Stokley used, and the last prescription which I had furnished to Mrs. M. A. Elliott.

Dr. Thomas H. Tanner, in his "Practice of Medicine," frequently advises the use of soluble medicated pessaries in almost every diversity of disease of the uterus, and its surrounding parts. In vol. 2, pages 776 and 777, he furnishes ten formulas of such pessaries, with the objects designated for which each is to be employed.

A REMARKABLE CASE OF COMPOUND AND COMMINUTED FRACTURE OF THE SKULL.

By William Bass, M. D.,
Of Lowell, Mass.
Reported by B. R. Benner, Med. Stud.

Clarence J. Way, about twenty years of age, was employed by the Lowell Foundry Co., as a moulder. While bending over his work on the morning of Jan. 5th, 1872, he was suddenly struck by a mass of iron, weighing three pounds six ounces, making a shocking wound in the top of his head. The missile was thrown a distance of thirty feet, through a window near which Mr. Way was at work, from a machine for breaking up old iron. The injured man fell to the floor, and was immediately removed by his fellow-workmen. Dr. Bass was summoned, and found the young man unconscious, bleeding profusely, and greatly enfeebled by the shock and loss of blood. His hair was matted with coagulated blood. This was cut away, and an examination made, which revealed a fracture of the most serious nature. On making a conical incision, and turning up the flaps, the bone was found depressed and broken into three large fragments, besides several minor ones, involving the anterio-superior angles of the parietal bones and the coronal and sagittal sutures, a little to the left of the median line, covering a space nearly as large as a silver dollar. The blood was pouring out from between the fractured pieces of bone in a way that, unless checked, would soon deprive the patient of life, and every moment of delay lessened his chance.

The doctor at once took away the fragments with elevator and forceps, and found the longitudinal sinus extensively lacerated; indeed, in this situation there appeared to be no trace of it left. The dura mater was detached for some distance away from the circumference of the fracture, but did not appear to be wounded, and the brain depressed from a half to three-quarters of an inch. Ligating the ruptured sinus was simply impossible, and pressure seemed the only feasible course. This was accordingly done. The doctor placed a sponge tent between the dura mater and the inner table of the skull, as near the mouth of the bleeding vessel as possible, and this had the desired effect of stopping the venous flow. Thick compresses were now placed over the wound, with the flaps turned up from the edge, the head dressed, and the patient removed to his home.

During these operations Mr. Way became conscious, and asked several questions relative to the injury.

Diluted brandy was given him at intervals, which considerably revived him. After reaching his home he was placed in bed, and strict quiet enjoined upon all. Some invigorating tonics were ordered, and he was allowed a light, nutritious diet. This happened on Friday. On the day following the wound was examined. Suppuration had commenced. The sponge had not moved from its position, but was pressing with considerable force upon the brain. On Sunday another examination was made, and the sponge found to be saturated with pus. There was imminent danger of its helping to extend the inflammation to the dura mater. Partly on this account, and partly from the unfavorable result which might follow from the pressure on the brain, the Doctor decided to remove it, hoping a sufficient coagulum had formed to arrest the bleeding.

By working it gently from side to side, and drawing upon it lightly, it was taken out entire, but not without the result that was feared; for as soon as the sponge was removed the bleeding was renewed.

By the Doctor's order, another sponge was saturated with a solution of tannic acid and glycerin, which he replaced within the cavity, but not quite as far forward as before, to

facilitate its removal. The head was dressed, as before, and for five days the sponge was left untouched. The dressings were removed, and an antiseptic wash of potassæ permanganas applied twice a day. At the end of this time the Doctor, deeming the danger of removing the sponge as less than the danger of its remaining, on account of the accumulating pus endangering the dura mater, concluded to take it out, but in a different manner from the first attempt.

At first he loosened the part of the sponge nearest the external wound, and snipped away a small portion with scissors. This plan was followed for six or eight days, at the end of which time the last piece was taken out, with no bleeding.

From this time the wound assumed a more healthy appearance; granulations were observed on the surface of the dura mater, and the brain resumed its normal position. There were several partially detached points of bone jutting from the inner edge of the fracture, but they were left to exfoliate, in view of the danger of disturbing the parts, and thus renewing the hemorrhage.

All this time the patient's general health was improving. His appetite was remarkably vigorous, and digestion good. The head was dressed two or three times a day, and small fragments of the bone removed from time to time, as they appeared on the surface. The wound continued to do well, filling out to near the surrounding surface, and Mr. Way is apparently as well as ever.

From several considerations, this must be regarded as a remarkable case. Nearly all the usual concomitants were absent. There was the compression of the brain by the injury, and continued by the sponges, for nearly two weeks, with no symptoms of a comatose or apoplectic character. Mr. Way's mind was unaffected. It was not even confused, with the exception of a few minutes immediately following the accident. There was no discoverable wound of the dura mater, despite the heavy blow received and the ragged nature of the fracture.

After the first fortnight the patient slept well. There was no heavy breathing or unnatural drowsiness, or dilatation or contraction of the pupils. There was some constipation for a few days after the accident, but this was relieved by a mild cathartic. Slight retention of urine the third or fourth day, but this symptom steadily subsided. No delirium or local convulsions. Recovery progressed favorably, and naturally, without a single drawback excepting the venous hemorrhage. The treatment was sustaining, from the necessity of the case, throughout. Potassæ permanganas was the only external application used, and this exerted a most favorable influence both as a styptic and antiseptic.

Editorial Department.

Periscope.

Experiments in Electro-Therapeutics.

Drs. Beard and Rockwell report the following experimental use of electricity, in *The American Practitioner*:—

HYSTERIA AND ALLIED AFFECTIONS.

Among the affections allied to hysteria is neurasthenia, a term which we have devised and applied to what is called nervous exhaustion—a condition where exhaustion is the leading feature—uncomplicated with any special organic lesion. One case of neurasthenia, with a full pulse of 115, was greatly improved by general faradization. A case of hysterical mania in a woman aged fifty-five, with symptoms of anæmia—constipation and delusions of various kinds, such as fear of the police, etc., all of six months' standing—was so much benefited by general faradization alone that after the tenth application she seemed to be entirely restored; but she soon relapsed, and treatment by general faradization was again employed. Under this she made progress, but slowly. Galvanization of the brain and sympathetic, however, brought her up to pretty nearly the standard of health.

Another case, a woman aged forty-five, who had been debilitated by a two years' siege of intermittent fever, and who presented the symptoms of globus hystericus, hysterical paralysis of the right arm, and melancholia, was so much benefited by twenty-five applications of general faradization that she was able to return to her duties as servant-girl. The melancholy was cured, and also the hysterical paralysis of the arm. Her pains were relieved, the bowels regu-

lated, and the appetite increased by the tonic effects of the treatment.

A case of chlorosis in a girl of eighteen, with the symptoms of yellowness of the skin, irregularity of menses, and general debility, was greatly benefited by general faradization. Two other cases of hysteria, with the symptoms of globus hystericus—nervous trembling, fits of crying, flashes of light before the eyes, and nervous twitchings of the muscles—were rapidly improved by general faradization.

It is a noteworthy fact that while neurasthenia, neuralgia, chlorosis, and many other affections allied to hysteria, are more frequent among the higher orders, hysteria itself is quite as common among the ignorant or servant-girl class, in whom the emotional nature reigns pretty nearly supreme, unchecked by reason, or education, or common sense.

NEURALGIA.

Of neuralgia, uncomplicated, but two cases were treated. A case of sciatica was apparently cured by three local galvanizations. A case of neuralgia of syphilitic origin was but slightly benefited by local galvanization, was made worse by central galvanization, and somewhat improved under general faradization.

We remark here that the statement made by some European writers of ability, that the faradic current is useless in neuralgia, is contradicted by the experience of scores of physicians in this country, who are every day relieving or curing cases of true neuralgia of a central origin by faradization alone.

RHEUMATISM.

Of the various methods of application employed for rheumatism, general faradization seemed to accomplish more than localized galvanization of the joints, and very much more than central galvanization. This would show so far forth that rheumatism is not so directly under the influence of the central nervous system as some other diseases. Rheumatism is, however, a constitutional disease, whatever its pathology may be, and merely local electrization of the affected joints is not satisfactory. It may relieve that particular part, but it does very little toward eradicating the disease.

General faradization favorably affects rheumatism in several ways: 1. By its stimulating tonic influence over the whole system. 2. By the relief of the local manifestations. 3. By modification of the urinary secretion.

Rheumatism is benefited by tonics of various kinds, as quinine, iron, etc., and general faradization acts as a tonic. By the special influence that it exerts on the liver and all the organs of digestion it greatly assists the cure of the forms of rheumatism that are at all curable. We have seen cases where the secretion of urine was greatly increased after a single application of general faradization; but the cases where such increase is demonstrable are not very frequent.

Muscular rheumatism is the type that gives way most readily to electrical treatment. Next to that the subacute articular variety offers the best chance of benefit; and last of all come the very chronic forms, where the unfortunate patient is, as it were, tied up in knots from long-standing affection of the joints of the upper and lower limbs. It is not pleasant to treat these latter cases. They appreciate, it is true, the tonic effects of the treatment in a general way, and that is about all. It is possible that localized galvanization, prolonged for hours or days by means of apparatus placed at the bedside, might compel these maladies to give way; but we have never yet brought this idea to the full test of experiment. The most hopeless forms of rheumatism are those which simulate arthritis nodosa, or rheumatic gout, if indeed they are not actually that disease. It is possible to do but very little for such cases.

PARALYSIS.

Of paralysis of different kinds we treated five cases, four peripheral and one infantile. These cases behaved as cases of paralysis usually do under electrical treatment, and upon this subject we have little that is new or suggestive to communicate. We simply remark that it is a mistake, and one that is often made, to use too strong currents and too long applications. A current just sufficient to produce muscular contractions is preferable. The earlier this form of paralysis is taken under treatment the better. It is delay frequently that makes it require protracted treatment.

DYSPEPSIA.

Six cases of dyspepsia were treated, five of which recovered and one was improved. The leading symptoms in the above cases were pain after eating, nausea, vomiting, pyrosis, constipation, anorexia, flatulence, and mental depression. The methods of treatment employed were general faradization, galvanization of the sympathetic, and pneumogastric and central galvanization. Very few diseases yield so surely to any remedy as nervous dyspepsia yields to electrization, the exceptions being those cases where from some peculiarity of constitution electricity is not well borne.

BRONCHITIS.

Five cases of bronchitis were treated. Of these one was much improved by five weeks' treatment with central galvanization; another case, complicated with phthisis, was considerably benefited in a general way by persevering treatment; another case was benefited for a time; and the fifth case, complicated with phthisis, was improved. None of the cases were perfectly cured, and those complicated with tubercular disease will doubtless die; and yet the electrical treatment of phthisis is not wholly a failure.

The method we adopted in cases of tubercular deposit in the lungs was to apply a mild galvanic current directly through the

diseased region, with a view to cause absorption. In the experience we have had with this method up to date we have had no satisfactory evidence that absorption of any great amount is caused by such treatment; but through the influence on the sympathetic and spinal cord, directly and indirectly, very much benefit is derived that deceives the patient and perhaps the physician.

ASTHMA.

Of asthma two cases were treated. One of these, a woman of middle life, had for three months suffered from the disease, brought on, as she said, by the smell of cooking. Galvanization of the sympathetic and pneumogastric at once benefited her, and in two weeks she was apparently cured, and we have not since heard from her. This is the best result that we have ever seen in asthma. It may be accounted for by the recentness of the attack; and the query occurs at once whether the majority of cases might not be cured if they were taken early, before the asthmatic habit had become engrafted into the system. The other case, a man aged fifty, had suffered for five years. His distress was very great, and the attempt to walk half a block caused a feeling of suffocation. One seance of five minutes gave him such positive relief that he was able to walk home, a distance of one mile. He did not return for treatment.

Asthma, so far as electrical treatment is concerned, would appear to come in the same category as facial spasm, blepharospasm, and other similar local spasmodic affections, which when recent and mild are very easily cured, but when long-existing and severe are susceptible only of temporary relief.

INTERMITTENT FEVER.

Three cases of intermittent fever were treated. Electricity is prescribed for those subacute or chronic stages of intermittent fever where the patient is able to go about, but is debilitated, and is liable to frequent or even daily attacks; not as a specific at all, for electricity is not a specific for anything, but as a general stimulating tonic.

SPINAL CONGESTION.

Of the cases that were treated in the dispensary one came twice, and was not benefited; one came three times, and was so much relieved that he came no more; one case, where paralysis of motion existed, was cured after two months' treatment; one case, after four applications, was very much helped; and still another case of an aggravated character was by two months' treatment (seventeen applications) so much benefited that the patient believed herself cured, until one day she walked a long distance, became exhausted, and the old symptoms appeared in full force. A second course of treatment again relieved her.

LOCOMOTOR ATAXIA.

Of locomotor ataxia (posterior spinal sclerosis) one case was treated, and mainly by galvanization of the spine and central galvanization. The benefit derived from a few applications was slight, and the patient did not return.

In regard to this disease there are two considerations of great importance: 1. That cases of simple spinal congestion or irritation are frequently called locomotor ataxia. 2. That when the process of degeneration of the posterior columns of the cord has actually set in, with the necessary body of symptoms that accompany such degeneration, perfect recovery is very rare under electrical or other treatment. In Europe, and especially in Germany, the so-called functional or milder disorders of the nervous system are much less frequent than with us, and hence physicians there are not prepared for them when they occur, and are apt either to ignore or mistake them. Even in the most recent German works, and in some of the medical journals of that country, we see cases of spinal congestion of a not very severe form mistaken for spinal sclerosis, and gravely reported as cured by hydro-therapeutics or electro-therapeutics, or by nitrate of silver.

Now, in regard to the electrical treatment of locomotor ataxia, our experience is that grateful relief or cure of some of the symptoms and decided general benefit is derived from it. Remissions and improvement that are greatly encouraging to the patient, and perhaps deceive the physician himself, occur; but never a perfect or an approximate cure, except in the early stages. The relief of the pain is very desirable, and this we may accomplish by central galvanization or general faradization; and it may be here remarked that some of the best results of the treatment of locomotor ataxia that we have seen have been accomplished by general faradization, either alone or alternating with galvanization of the spine.

ADDISON'S DISEASE.

A woman that presented the bronzed-skin appearance of Addison's disease was treated for one month by general faradization with benefit as regards her general symptoms. In private practice, in a case of undoubted disease of the suprarenal capsules, where the diagnosis was made by Prof. Austin Flint, we have demonstrated that general faradization and galvanization of the sympathetic, although powerless to effect a cure, are followed by results the most gratifying, so far as improvement in the general condition of the patient is concerned.

DISEASES OF THE SKIN.

What has been learned in the electro-therapeutical department of the dispensary in the treatment of diseases of the skin is itself a sufficient reward for all the expense of inaugurating such a department, and for all our professional labors there from the beginning until now. Dr. Woodruff, one of the physicians in charge of the skin class, has shown great interest in our investigations by sending in cases, and thus given us opportunity of testing the various methods

of application in a department which now promises to be one of the most satisfactory of all the special branches of electro-therapeutics. We had previously experimented in the electrical treatment of some of these diseases, in connection with Dr. Piffard, at the dispensary for diseases of the skin, and also in private practice by intervals during the past three or four years.

Eleven cases in all of diseases of the skin were treated in the electro-therapeutical department; six cases of chronic eczema, and one case of each of the following diseases: psoriasis, erysipelas, syphilitic tubercle, favus, and superficial ulcer. All the cases of eczema that persevered (three in number) recovered. The case of psoriasis did not persevere, the case of favus was not benefited, and the ulcer was cured. It was here that we first demonstrated the immediate and sometimes permanent relief of the pain, itching, and burning with which eczema and other diseases of the skin are so often associated.

TUMORS.

Of tumors ten cases were treated, as follows: two cases of scirrhus of the breast, one of epithelioma of the lip, two of uterine fibroid, four of goitre, and one cystic tumor. The goitres were all reduced in size more or less by the use of the needles; but none have yet been entirely cured, although some of them have been treated with great perseverance and by all varieties of applications, by catalyzation—that is, by external applications with sponges, by one needle or by many needles—with and without ether, and by ether spray. Goitres do not rapidly disappear under electrization. In many cases, like fibroids and other tumors, they grow smaller under the treatment up to a certain point, when they hang fire, and will not budge an inch further.

It is, of course, possible to destroy any tumor that is accessible by electrolysis, provided a sufficiently strong current be used, and sufficient time be given to it; but then the question must always arise whether the disease or the remedy is most to be dreaded. For malignant growths the choice is easy. For benign, painless growths, like small goitres, it is a question whether they are worth the pain and annoyance of an operation of any kind.

THE METHOD OF WORKING UP THE BASE.

The epithelioma of the lower lip was destroyed, root and branch, by a method of electrolyzation that we have recently employed, and which we call *working up the base*. This method consists in inserting the needles around the tumor and partly into the healthy tissue, so as to undermine the former and cut off all communication between it and the healthy tissue. This method is followed by complete sloughing of the growth, granulations, and healing. The usual and accepted method of electrolyzation is to insert the needles directly into the tumor.

The method of working up the base or undermining the tumor has the advantage that it is more thorough, since it makes sure of the complete destruction of the growth; that it is shorter, since it wastes no time on the body of the tumor, which really is of no consequence if it be separated from the healthy tissues; and that it insures a more satisfactory healing.

Tic Douleureux Treated by Galvanism.

Dr. JAMES T. WHITTAKER, writes to *The Clinic* as follows:—

A little more than a year ago I published the details of a most aggravated case of Tic Douleureux* of many years duration, which was cured by the daily application, for two weeks, of the constant current of galvanism. In the presentation of this case I made the following reservation: "The publication of this case of trifacial neuralgia is perhaps premature. The marked improvement, however, which has gradually established itself, justifies the conclusion that the change already effected is due solely to the local treatment, and that it will continue to perfect recovery." This conjecture met with full justification. But one week more was required to establish a perfect cure. Perfect but not permanent.

One whole year passed away during which time I neither saw nor heard of this patient. The presumption was safe that he was free from pain. On August 12th, 1872, he again presented himself with the statement that he had been absolutely free from attack until about one week ago. He had become thoroughly wet through while working in the rain, but felt himself in such a condition of health that he had adopted no precaution in protection from its effects. On the next day he felt "a touch of the old pain." This touch had repeated itself every day during the past week, and now showed a decided tendency to recur more frequently. "It was coming back on him as at first."

The same treatment was of course resorted to. One electrode (Siemen's and Halske's battery, eight cups) was applied behind the ear, the other was played about the face with longest contact over the supra and infra-orbital foramina. As at first the application was decidedly pleasant. In four days (five minutes' sessions) he was well again, whereupon he returned to his work.

On September 1st he again presented himself. While at work under the blazing sun a few days ago, he suddenly experienced a "twang" of the old pain. Yesterday and to-day the spasmodic exquisitely painful twinges had seized him again. I had the opportunity of observing one of these attacks just as he was entering my door. A sudden spasm convulsed the left side of his face, he dropped his head between his hands and at once commenced a rasping friction of the affected side which would have soon denuded the skin had the pain continued long.

* Cases in Galvano-Therapy, The Clinic, Aug. 12, 1871.

The conjunctiva was deeply suffused at once, the face flushed, the mouth dribbled saliva. Galvanism was applied at once, and the relief of pain was so great under its application as to draw from him the liveliest expressions of gratitude. The pain ceased to recur after the second day. As late as September 10 there was still experienced a sensation of burning about the orbital circle, but at no time a regular attack of "twitch or twinge."

To-day, September 12, there is no abnormal sensation whatever. The eye has recovered its normal appearance; the pruriginous eruption, always present during the existence of the disease, has vanished; the senses of smell and taste, always impaired by the trophic lesions associate with trigeminal affections, are fully restored; the whole side of the face has recovered the aspect and functions of health. Among the most satisfactory phenomena produced by the cure is the improvement in his mental condition. The agonizing suffering of the seizure kept him during the period of liability constantly alert for the coming pang. Pain had made him a coward. It was a long time after the first relief before his countenance lost this expression of dread and fear. He returns to treatment now, on recurrence of the disease, with perfect confidence of cure. Despair has been substituted by hope.

In reporting the case of Niemeyer, which has now become celebrated, where "surgery and electricity had both a fair trial," Althaus left it an open question whether the effect of the galvanism would be more permanent than that of the surgical operation. He expressed the belief that the continuous current would be preferable to neurectomy in all cases. "In the first instance because it does not injure or destroy the nerves which are necessary for the proper nutrition of the face; and secondly because it has the power of completely altering the nutrition of the affected nerves, owing to which it probably produces more permanent effects than neurotomy." He believed then that "if a relapse should occur the same remedy would again produce the same effect."

The instance of this engineer, as reported, adds another to the swelling list of confirmatory cases.

Electricity in the Treatment of Malignant Tumors.

Dr. J. S. C. GREENE, in the Boston *Medical and Surgical Journal*, writes in reference to late statistics on this point:—

Among the sarcomata reported are the two first tumors treated by electrolysis. Each was larger than an apple, and each was destroyed in fifteen minutes, at a single sitting. A sarcoma epulis as large as a pigeon's egg was, in seven minutes, destroyed down to the bone. No fever, and but slight local reaction followed. On the thirteenth day the tumor, with a small lamella of bone came away, and cicatrization was rapidly completed.

Of the cases of cancer the majority were very extensive, some, indeed, quite hopeless. Of the whole number, however, thirteen were successfully operated on, two were discharged from hospital improved, and two without any improvement. Of these one was a patient who refused to submit to a completion of the operation because of the pain, anæsthesia having been but incompletely produced (no uncommon occurrence in Vienna operating theatres, a tacit confession of the distrust with which chloroform is regarded), and one died of intercurrent disease during the time of treatment. In the cases of most extensive disease a very powerful current was employed, under anæsthetics, usually in a single sitting, with one reapplication to suspicious spots. In other cases anæsthetics were not employed; the current was used as strong as the patient could bear it, and the operation was protracted to four or six sittings of from fifteen to sixty minutes.

In a case of cancer of the rectum, involving the vicinity of the orifice externally, and extending upwards from the anus two inches, and sharply defined above, the patient suffered from pains so severe that even large doses of morphine injected subcutaneously could only temporarily palliate it. At the same time a most penetrating odor was disseminated. In the first sitting the external part alone was attacked, and in forty-two minutes it was destroyed. No anæsthetic was used. The pain from this time became so much less that the patient required no more opiates, and the offensive odor ceased to give further annoyance. The slough separated on the fifth day. Three days later the internal infiltration was submitted to treatment. The sloughs separated soon, and the general health of the patient improved so much that in less than seven weeks from the date of the second operation he was discharged, well. The subsequent history of this case is not given.

In three cases it was possible thoroughly to destroy carcinoma which was so intimately connected with the inferior maxilla that, had it been operated on by the knife, resection of that bone would have been necessary. In another case of epithelial cancer of the lower lip, the swelling of the submaxillary glands of both sides, which were largely infiltrated, entirely disappeared after the destruction of the primary disease by electrolysis. The same phenomenon was observed and reported by Dr. Neftel, of New York, in a case of recurrent cancer of the breast, which had been previously twice removed by excision.

It is worthy of note that neoplasmata have been frequently observed to grow much more rapidly under the stimulus of too weak a current, which had been employed with the intention of destroying them.

These may serve as illustrations of some of the advantages of electrolysis as a means of operation. Besides, it should be observed that there is complete absence of loss of

blood, and of all reaction due to such loss. Indeed, as a means of arresting bleeding from an artery which is inaccessible to ligatures, nothing can be neater or more efficient than to pierce the vessel with a needle just above the bleeding point, the needle being connected with the positive pole of a battery, the negative pole being, of course, also brought into connection with the body near by.

So free from risk is the application of electrolysis that Benedikt reports a case in which he introduced a long needle into a fibroid tumor of the uterus through the abdominal walls; no general reaction followed, and the local reaction was quite insignificant. So completely free from all formidable features is it, if performed under ether, that electrolysis may be employed, even if only as a palliative operation, in many cases where it can at least afford relief from painful and distressing symptoms, and render a prolonged life supportable, when operation by the knife might be refused by the patient, or, indeed, might involve so many chances of an unfavorable result as to forbid the surgeon's advising it.

On the other hand, the expense of a battery fitted for electrolytic operations is not inconsiderable; such a battery is with difficulty transported, and with the batteries hitherto used the time which such operations require is relatively somewhat long. Perhaps still more powerful batteries, or the simultaneous use of more than one for different parts of a tumor, might obviate this last disadvantage.

Dust as an Exciting Cause of Disease of the Air-Passages.

Dr. Wm. H. Bennett says, in the *Medical Record*:—

My attention was first called to this subject by the following observations: I noticed that many persons with chronic nasal catarrh instinctively shunned dusty localities. And in making rhinoscopic and laryngoscopic examinations, I several times discovered the superior pharyngeal space and interior of the larynx covered in places with a coating of dust and mucus, which, on being removed, exposed to view an irritated and not unfrequently an ulcerated condition of the membrane beneath. I found many individuals with slight catarrhs suffered no inconvenience whatever while residing out of the city, but on coming to town they were always made very miserable, except in wet weather or when the streets were well sprinkled, by the sensation of burning and dryness which the dust produced.

It is easily understood that the finer and lighter the particles of matter, the more readily and more deeply they will penetrate the air-passages. In my opinion it is the finer dust which does the most harm; for although upon being deposited it causes less irritation than the coarser variety, yet it remains longer upon the membranes, mixed with the secretion, and hastens decomposition; while particles of any magnitude do not ordinarily get farther than a short distance into the nasal cavities, and they excite sufficient irritation to be almost immediately thrown off. Under favorable circumstances the finer matter may remain in the air-passages some time; *i. e.*, when the secretion is scanty and viscid, or when the epithelium is wanting. I have collected from the larynx of a living subject immediately after a thirty-six hours' rain, a black deposit which proved to be composed of minute particles of dust. This may possibly have been inhaled in-doors, but I do not think such an explanation probable.

The time required for the production and fatal termination of that form of pulmonary disease known as stone-cutters' consumption, knife-grinders' rot, bronchial phthisis, etc., depends *cæteris paribus*, altogether upon the composition and nature of the matter inhaled. Thus, knife-grinders who grind on dry stones are affected and die sooner than stone-cutters, and these latter succumb sooner than those that work in cotton factories and rope-walks. Now this is exactly what we would expect; for the patient in the first instance is exposed to a very fine dust, which penetrates deeply into the air-passages, and the particles are exceedingly sharp and angular, irritating to the utmost degree. While in the two latter cases, although the atmosphere breathed is more heavily laden with particles of matter, they are softer, coarser, and do not so readily scratch and penetrate the tissues with which they come in contact. However, the atmosphere of all large cities, and of the city of New York in particular, contains dust of every description, and of the foulest and filthiest kind. We get the fine sharp particles which are ground from the pavement, as well as the earthy and organic matter; and the scavengers do their part to make the situation worse by leaving in the gutters a good share of the ashes and garbage which should go to the dumping-grounds. Decomposing vegetable and animal substances, together with the excrements of the numerous animals which crowd our streets, furnish a share of what is taken in with every breath of air. There is plenty of food upon which germs may subsist, and a rich soil for them to multiply in.

The most of the dust inhaled is deposited on the Schneiderian membrane, in persons who breathe as they should, through the nose; but much of it reaches the pharynx, and some of it gets into the larynx; of this we have positive proof. And although we cannot demonstrate in the living subject that any of the suspended matter reaches the bronchi, we have every reason to suppose it does. We know it does in those cases where the atmosphere breathed is excessively charged, and it must under ordinary circumstances, only in a less quantity. Now, granting this, does it not claim our attention in cases of pulmonary consumption? Not only are the paroxysms of coughing increased in frequency and violence, but,

supposing the irritant to penetrate to the affected parts of the lungs—as, for instance, where a vomica communicates with a large bronchial tube—is it not reasonable to suppose sufficient irritation might thus be produced, by the entrance of dust particles, to cause the disease to extend where otherwise cicatrization would have taken place?

But the parts which most suffer from contact with the dust are the lining membranes of the nares and pharynx. They filter the air which passes over them of most of its suspended matter, and consequently are subjected to the greatest amount of irritation. In many cases of catarrh the nasal passages are so narrowed, from swelling of the mucous membrane which lines them, that the patient is obliged to breathe in part or altogether through the mouth; and here the lining membrane of the larynx is equally exposed to the influence of the dust.

On Veratrum Viride as a Hemostatic.

Dr. J. W. COLLINS says, in the *American Practitioner*:—

The action of veratrum viride as an arterial sedative of very great power, and of especial value in the catarrhal phlegmasiæ, as well as in many other diseases attended by excessive and forcible action of the heart, is perhaps sufficiently understood, by American physicians at least; but I have nowhere seen any mention of the power of the remedy as a hemostatic. Yet, after an extensive use of the drug in different forms of hemorrhage, I am thoroughly satisfied that it possesses the property in a very remarkable degree. I esteem it the promptest as well as the most reliable of all our means for controlling both active and passive hemorrhage.

The first case in which I had occasion to test the hemostatic powers of veratrum was one of hemoptysis, which had resisted all the usual remedies, but yielded almost at once to five drops of Norwood's tincture, given every hour for six hours. It is worthy of remark that the tolerance of the drug was very striking in this patient, the large quantity given having produced neither nausea nor other unpleasant symptoms. The next case was one of aneurism of the left subclavian artery, the result of an injury to the vessel in its second part, or just behind the scalenus anticus muscle, from the small blade of a pocket-knife. The tumor was about the size of a hen's egg, and involved all the second portion, and probably the first also, of the vessel. It was accompanied by the characteristic thrill, pulsation, pain in the shoulder and arm, absence of radial pulse, coldness of the limb, etc. Not deeming an operation advisable, and digital or other compression being impossible, I determined to give the veratrum, in the hope that it might so lower the action of the heart as to favor the formation of a coagulum in the aneurismal sac. I began with five drops, increasing the dose by one drop every third hour, until the full sedative effect of the medicine was produced. I continued it, in doses of from five to twelve drops, for ten days, at the end of which time the tumor had almost entirely disappeared, a small, hard lump only remaining, with very slight pulsation, no pain in the arm, no thrill, and considerable pulse at the wrist. The patient, a stout young negro, thinking he was well, quit me, but returned at the end of two weeks, with most of the symptoms as well marked as at first. I put him on the same treatment, and continued it for fifteen days, the last six days merely to make sure of a cure, for the tumor, with all the attending symptoms, had disappeared, the radial pulse had become normal, and the natural temperature of the extremity restored. At the end of twelve months I saw him again, when he informed me that he had been uniformly well.

What results might be obtained in aneurism from the veratrum, used in conjunction with compression and flexion, time must determine, my own opportunities for observing its effects being limited to the foregoing case.

In epistaxis, seemingly independent of the cause which gave rise to it, the veratrum has been in my hands uniformly successful. It has been equally so in menorrhagia, active or passive. In a case of secondary hemorrhage, occurring on the third day after amputation of the cervix uteri, I believe the remedy saved my patient's life. It has unfailingly arrested the hemorrhage which has occurred in two cases of uterine carcinoma now under my care, and in one of these without at any time producing the least nausea. Indeed, the control which it exercised over the floodings, which had previously worn the patient almost away, has allowed her to actually gain in both flesh and strength, and awaken in her mind the delusive hope that she will recover.

My friend, Prof. J. T. Gilmore, of Mobile, informs me that, at my suggestion, he used the veratrum with entire success, after other means had failed, in a secondary hemorrhage following amputation of the thigh; also in a case of epistaxis, which was so obstinate as to threaten life. Dr. Gilmore further says that the veratrum, given in doses of fifteen drops, is regarded by the profession in Mobile as being the most efficient remedy in certain cases of puerperal eclampsia. I myself have not had an opportunity of using it in such conditions, but do not for a moment doubt that it would prove a most reliable agent in a certain class of these cases. I have seen the best results follow its use in the periodical hemorrhages which occurred in two cases of placenta previa.

My single object in communicating the foregoing has been to call the attention of the profession to the veratrum as a very powerful and very reliable agent for the arrest of hemorrhage, both active and passive. It should be given in doses of from three to fifteen drops, repeated every one, two, or three hours, according to the urgency of the case, always carefully watching its effects.

Gunshot Wound of Stomach and Kidney.

The following case, reported by J. W. BROOKS, M. D., in the Chicago *Medical Journal* has some unusual interest:—

Dec. 31st, 1871. W. C., about 30 years of age, had taken an early breakfast, and with his brother had been engaged in completing a job as carpenters. Was in the possession of uniform good health. I think had served some three years in the Union army during the war of the rebellion. At 11 o'clock they returned to their boarding house to make up their bills. He very soon discovered a Derringer pistol, carrying a half-ounce ball, lying in a drawer near him, took it, blowed into two or three of the muzzles, withdrew it, and pointed it towards the stomach. His brother remonstrated; he replied, no danger, and at that instant one barrel discharged (it being, I think, a six-barreled one), taking a downward, backward, and slightly lateral direction. He staggered, partly falling on a bed, rallied to his feet, ran down stairs, and sank on a lounge. In five minutes the writer saw him. There was great nervous shock; the skin cool, clammy and moist; prostration great; constant nausea; pain in the stomach; restlessness; respiration feeble, and some thirst. Surface wound about two inches to the left of the centre of the sternum, having cut the size of the ball from the lower edge of the cartilages of the false ribs. Directed him removed to an upper room, and laid recumbent, head low, a cloth wrung from hot water to be placed over the wound, and to be kept constantly applied, small pieces of ice (as large as a small filbert) placed in his mouth. Imperative orders that no instrument touch the wound, bottles of warm water to the feet, absolute rest. 3 P. M., no reaction, very restless, much nausea, pulse not improved. Gave one drachm of opiate solution (prepared from the dregs of opium that had been used in the preparation of officinal tinct. opii), with tartaric acid, with directions to repeat in two hours, if necessary, which was twice done. 8. P. M., still sick at the stomach; no reaction. At 8.15 P. M., vomited between one and two pints of coagulated blood; at 9.10 P. M., passed about three pints bloody urine, resembling the blood that flows from the vein of an individual killed by lightning; a fourth drachm was now given. At 10.20 P. M., reaction commenced feebly; from 11 P. M to 3 A. M., slept quietly, and on awaking vomited a large quantity of blood, which was the last blood vomited; at 4 A. M., passed an ordinary urinal half full of fluid, mostly blood; from this time he urinated about once in six hours, blood always passing till the fifth day, when the urine was of a natural color and quality.

After the first sixteen hours he had no pain whatever, and slept well every night. At the expiration of forty-two hours he was allowed one teaspoonful of iced milk, in four hours two teaspoonsful; this was gradually increased till on the fifth day he was allowed one-third of a tumbler of the iced milk every six hours. Not an untoward symptom occurred. The hot cloth wet was kept applied up to Jan. 6th, 1872. No other medicament was used. The fourth day the bowels moved naturally. On Jan. 8th, he was removed to his home in the country. On or about May 1st he returned to the city, and followed his occupation as a carpenter. On examination the 7th of May I found the ball under the skin, about two and a half inches from the spinous processes of the vertebræ, and nearly outside the eleventh rib of the left side, having passed out of the abdominal cavity between the eleventh and twelfth ribs. The direction of the ball, the vomiting of blood, the passing of blood by the urethra, the character of the shock and prostration, point unmistakably to the cutting of the stomach and left kidney by the ball.

New Method of Prescribing.

Mr. JEAN PAUL BONSIEUR says in *The Clinic*:—

The present mode of prescribing is not characterized by the simplicity and accuracy modern science demands; and as the cumbrous apothecaries' system cannot be thrown out and the French decimal method adopted without an entire revolution, it behooves us to simplify the process as much as possible. For that purpose I would suggest what may be called the one dose prescription plan, *i. e.*, to write only as much of each constituent as shall be required in each dose; these can then be left to be multiplied by a common multiple, placed on the margin; for instance:

℞. Ferri redacti, gr. j.
Quin. sulph., gr. ss.
Ext. gentian, gr. j. } X. 12.

The prescription will always be understood to be a dose, the only directions required will be the intervals between each dose.

I will enumerate a few of the advantages of this method over the old plan.

It is the safest. The menstruum may be left out with perfect impunity; conceive such a lapsus mentis with the present mode; and yet such an error is by no means rare. Again circumstances often render almost impossible the elaborate computation of a compound prescription. What is the consequence? Mistakes are continually being made, and were it not for the vigilance of the druggist the most disastrous results would sometimes follow. If, however, he should use the single dose method, knowing of course the properties and dose of each drug, he can exactly adapt the quantity to the therapy of the particular case; he can review his prescriptions and see that no constituent is inordinate; can judge better of the modifying action of each drug on the others. To avoid the dangers of original prescribing, there is a reprehensible method much in vogue now of using ready-made prescriptions—of having a set of formulæ ready for all emergencies—of fitting the pa-

tient to the prescription, instead of the reverse. To supply this demand we have books gotten up on the ready-reckoner type, all the prescriptions ready compiled and arranged under the name of each disease. The above assertions can all be verified by the examination of druggists' files in the city as well as in country towns.

The economy is so much greater, both in private and dispensary practice. The physician can calculate easier the quantity of the medicine necessary to last till his return, or the return of his patient, like a skillful caterer.

Cold Water Treatment of Typhoid Fever and Rheumatism.

Dr. EDES, in the Boston *Medical and Surgical Journal*, makes the following summary on this subject:—

Schols, in Bremen, has lost, since 1869, 5 cases in 125, that is, 4 per cent. Baths were given when the temperature rose above 39° C. (102.2° Fahr.) In severe cases, cold applications were made to the chest and abdomen. The chief contraindication to this treatment is intestinal hemorrhage. It is also but little applicable to those rare cases, mostly among habitual drunkards, where the disease, though presenting severe symptoms, is not characterized by a high temperature.

Bauer, in Munich, concludes that the mortality in general is diminished by the cold water treatment; that the mortality is increased by a disregard of the disease in its early stages, the want of regular, early, anti-febrile treatment, and by insufficient nourishment. Baths were given at 39.6° (in rectum), and ice bags applied. The baths were usually at 16° or 18°, or if the patient was very weak a longer one, at a higher temperature, was used.

Lissauer, in three army hospitals, observed a mortality from typhoid of 11 in 46, under an expectant treatment, and of 6 in 97 under the use of cold water. He considered that great advantage was derived from a combination of the cold water treatment with the use of quinine, according to Binz' plan, giving 1 gm. (15 grains) at night. In this way the remission of the fever was prolonged so that it was possible to get along with two, or at the most three, baths per diem.

Götz reports from the Vienna General Hospital that the mortality from typhoid under the expectant treatment was 28.72, under cold water treatment, 15.4. In typhus maculata, on the other hand, the corresponding figures were 17.97 and 26.16.

Brand criticises a report from Duchek's clinic, in Vienna, which was unfavorable to the cold water treatment, because the baths were not continued through the night, as they should have been. He says that it is not sufficient to bathe when the temperature reaches 39° C., but that the baths should be given often, and long enough to keep the temperature between 37° and 38° (98.6° and 100.4° Fahr.), or within a few tenths of a degree of this limit. He thinks that the fever may thus be completely kept under, and, if the treatment is begun early enough, the mortality reduced to zero.

Riegel applied the cold water treatment in the Julius Hospital, at Würzburg, in a mild (?) form. The bath was warmed to 68° Fahr., and the patient allowed to remain therein ten minutes. Half baths were used, and colder water poured on from above. Baths were given when the temperature reached 103.1°, and in the intervals cold compresses were applied to the abdomen. In the years 1870 and 1871, of 156 patients with typhoid, only the severer cases being reckoned, only 7 died (4.48 p. c.) Before the introduction of the cold water treatment into the same hospital the usual percentage of mortality was 20 per cent. Riegel, like Jürgenson and Hagenbach, observed very frequently a severe burning pain in the soles of the feet, so that there seems to exist some connection between this symptom and the cold water treatment. Intestinal hemorrhage seemed no more frequent than under an expectant treatment, perhaps from the mild character of the hydrotherapeutics.

Dr. Kelly reports two cases of hyperpyrexia in rheumatism, in one of which, a man, the temperature gradually rose until death, while in the other, in which the temperature rose even higher, the cold pack was applied, by sheets continually wrung out of cold water, reducing the temperature in four and a half hours from 106.2° to 99.6°. Brandy was frequently given throughout the treatment. From this date the patient began to mend.

REVIEWS AND BOOK NOTICES.

NOTES ON BOOKS.

Dr. WALTON is about bringing out a work on the Mineral Springs of the United States, especially New York, Pennsylvania, and Virginia.

——The second part is announced, of Prof. A. COURTY'S *Traite pratique des maladies de l'uterus, des ovaires et des trompes consideres au point de vue du diagnostie et du traitement, contenant un appendice sur les maladies du vagin et de la vulve.*

——The large *Dictionnaire de medecine et de therapeutique medicale et chirurgicale* of MM. BOUCHUT and DESPRES has reached a second edition, with numerous additions and emendations.

BOOK NOTICES.

General and Differential Diagnosis of Ovarian Tumors, with Special Reference to the Operation of Ovariotomy; and Occasional Pathological and Therapeutical Considerations. By WASHINGTON L. ATLEE, M. D. With 39 illustrations. Philadelphia: J. B. Lippincott & Co. 1872. pp. 482.

The profession throughout the United States will be glad to welcome this volume, the result of years of assiduous and extended study of the class of diseases of which it treats. No other man in the United States, probably no other man anywhere, has had such experience in the operation of ovariotomy as Dr. Atlee. As he remarks in the preface, he commenced the study of the subject, and long continued to practice the operation, when the whole medical world denounced and opposed it; when there was no literature on or teacher of it; and when he had nothing but the book of nature to instruct him, and the consciousness of right to sustain him.

He now undertakes to sum up in two volumes the rich results of his many years of observation and experience. The first of these, on the differential diagnosis of abdominal tumors, is that before us; the second, comprising cases and their surgical management, will be issued as soon as the author's engagements will permit.

The work commences with the general diagnosis of ovarian tumors. The signs laid down are illustrated copiously by cases drawn wholly from the author's own experience, and often aided by outline sketches.

The second section is on differential diagnosis, which occupies much the larger portion of the book. The numerous instances adduced of mistaken diagnosis, even in the practice of skilled physicians, prove most forcibly how much a treatise of this kind is needed. One example may serve to show this: (Case CXXX). Last year, at the meeting of the Medical Association in San Francisco, Dr. Atlee was asked to see a patient in the Woman's Hospital, supposed to have ovarian tumor. He learned that Dr. STORER, of Boston (editor of the *Gynæcological Journal*), had examined the patient, had agreed with the surgeon in charge, and they had fixed on an early day for the operation. Yet it was simply a case of unusually fat abdomen! She was perfectly healthy, and there was no tumor of any kind! Of course, no operation was performed.

A very valuable chapter in the work is one on dropsical fluids of the abdomen; their physical properties, chemical analysis, microscopic appearance, and diagnostic value. This has been chiefly prepared by Dr. THOMAS M. DRYSDALE, who has assisted Dr. Atlee in several hundred operations. It contains a series of researches, most carefully conducted, quite without precedent in medical history.

In this work we have an unusual amount of *original* matter; in fact, it is altogether drawn from the author's long and carefully studied experience. In this respect it is almost unique, and is an honor to independent American surgery.

The Science and Practice of Medicine. By WILLIAM AITKEN, M. D., Edin., etc. Third American, from the Sixth London Edition, greatly enlarged, remodeled, carefully revised, and many portions rewritten; adopting the new nomenclature, and following the order of classification of diseases prescribed by the Royal College of Physicians of London. With additions by MEREDITH CLYMER, M. D., etc. In two volumes, with steel plate, map, and 180 wood-cuts. Philadelphia: Lindsay & Blakiston, 1872. Price, cloth, $12.00.

As will be learned from the above compendious title, this edition of Aitken's "Practice" is far in advance of previous ones in adaptation to the wants of the physician. The additions increase the size of the work nearly one-third, and the alterations are so many that they, together with the new arrangement of diseases, make it, to all intents and purposes, a new production.

Those parts where the most material changes have been made are on the topics relative to pathology and morbid anatomy, and in the sections on the prevention and treatment of diseases. All the more recent advances in therapeutics, which are recognized as of established merit, are embodied, and careful descriptions of the various novel means of diagnosis, such as the sphygmograph, etc., are included.

The American editor, on his part, has devoted his usual conscientious care and

well-known ability to filling up whatever lacked in the original work, to adapt it to the special wants of medical men in this country. His articles are upon a large variety of subjects, and represent almost exhaustively the contributions of our professional writers to modern practice.

New Treatment of Venereal Diseases and of Ulcerative Syphilitic Affections by Iodoform. Translated from the French of Dr. A. A. IZARD, by HOWARD F. DAMON, M. D. Boston: James Campbell, 1872. Paper, 8vo, pp. 73. Price 50 cents.

The author of this monograph collected his facts while interne at the Hopital du Midi, where he witnessed an extended employment of iodoform as a topical application in soft chancre, syphilitic glandular involvement, and syphilides. Its special value, he considers, is that it produces, more certainly and promptly than any other therapeutic agent, the cicatrization of ulcerative syphilides. Moreover, it is a local anæsthetic of considerable power, and relieves the soreness and pain which accompany these lesions. No claim is laid to any general effect on the constitution; hence its employment in hard chancre (our author is a pronounced dualist) is confined to its action as a resolvent and anæsthetic. Internal treatment should not be dispensed with. In other words, iodoform is a valuable assistant in healing syphilitic local lesions, but is not put forth as a remedy for the disease.

These statements, it will readily be conceded, are of value and interest, and we recommend the work to those who would read a judicious monograph on syphilotherapeutics.

Epidemic Cerebro-Spinal Meningitis. With an Appendix on some points on the Causes of the Disease, as shown by the history of the present epidemic in the city of New York. By MEREDITH CLYMER, M. D., etc. Philadelphia: Lindsay & Blakiston, 1872. 12mo, cloth, pp. 59. Price $1.

This is a reprint, with a few additions and corrections, of the author's essay on the disease, inserted in the American edition of Dr. AITKEN'S *Science and Practice of Medicine*. From the prevalence of the disease at present in New York City and several other localities in the United States, it will doubtless be a useful and acceptable publication. The author has added a short history of the present epidemic in New York city, and attached to the volume a map of the city, showing its presence most frequently in houses constructed on made land, over spots where marshes formerly existed.

In the present epidemic the cases have been chiefly among children, and can generally be traced directly to the cause above adverted to, or other unsanitary conditions. No evidence of contagion or infection could be discovered. The mortality was high. Between January 1 and June 30 790 cases were reported, and 607 deaths. It is easily seen from this that treatment was of little moment.

Hysterology; a Treatise, Descriptive and Clinical, on the Diseases and Displacements of the Uterus. By EDWIN NESBIT CHAPMAN, M. A., M. D., etc. New York: William Wood & Co., 1872. 1 vol., cloth, 8vo, pp. 504.

We have already given to our readers in THE REPORTER some of the interesting results in uterine treatment at which Professor CHAPMAN has arrived in the present work. A careful examination of his volume confirms us in the high opinion we had already formed of it as a treatise based on original research and carefully classified observations. His conclusions are drawn from his own clinical experience, and commend themselves by their moderation, freedom from hobbyism, and the clear and precise language in which they are expressed.

The general doctrine which the author advocates in reference to uterine diseases is, that they arise from a perversion of the physiological congestions to which the genital organs are especially prone, from a physiological to a pathological state. He shows by a series of proofs that morbid congestion and not inflammation is present in most cases of uterine disease.

Hence his classification of these diseases is into a series of congestions, anatomically defined, either active or passive, and occurring either in nulliparæ or multiparæ.

Over three hundred and fifty cases are given, in more or less detail, and a summary of them added toward the close of the work. The last chapter, on treatment, is thoroughly sound and practical. Various illustrations are added, and the manufacture of the book is throughout satisfactory.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, OCT. 5, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

ATROPIA AND MORPHIA AS ANTAGONISTIC.

The question of the effects of full or toxical doses of morphia and atropia, when administered simultaneously or in rapid succession, occupied considerable attention in the medical world last winter, in connection with the trial of Dr. MEDLICOTT for the alleged murder of Mr. RUTH. A number of opinions of various experts were quoted in the last number of our HALF-YEARLY COMPENDIUM, where the reader can see how discrepant they are.

The July number of the Dublin *Journal of Medical Science* contains a case illustrating the general physiological antagonism of the two alkaloids, as read before the Medical Society of the College of Physicians of Dublin by Dr. JAMES FINNY. He administered to a Miss C., by the hypodermic syringe, ½ grain acet. morphiæ and 1-25 grain sulph. atropiæ, using a double dose of the latter, under the impression it was weak. He chose the mixture because he finds it diminishes the tendency of the morphia to nauseate, and produces more complete anodyne effects.

In about twenty minutes the patient complained of great cold, and shivering. The tongue and throat were dry, and swallowing difficult; speech thick, vision dull, pupils dilated; pulse small, and 130; respiration 32, and shallow.

Dr. FINNY proceeds:—

"The case was evidently one of atropism, produced by an over-dose of the alkaloid, as it now was evident that my solution, in spite of the floating bodies, was as strong as before, and that instead of 1-50 grain I had injected 1-25 grain at the least. Hoping the ill effects would not become worse, but would shortly pass away, I remained beside her to watch the result; but, instead of becoming better, instead of the symptoms diminishing and sleep ensuing, I soon saw the case change from one of simple interest into one of no small anxiety to me.

"In about ten minutes, in addition to the above enumerated symptoms, she evidenced great uneasiness, tossed about, flexing and extending her arms and legs; she now became delirious, talking on various subjects, being quite unaware of my presence, and imagined several persons to be in the room, giving directions to them on various domestic matters. She grasped at imaginary objects in the air; and from, no doubt, the parched state of her throat, frequently attempted to pass her finger to the back of the throat, and nearly succeeded, on one or two occasions, in producing vomiting. She also seemed inclined to get out of bed, but was easily restrained. The pulse still kept high, and though the extremities were not quite so cold, I thought things were quite bad enough, and determined, without further delay, to send for additional aid and advice. Before doing so, however, the thought occurred to me to try the effect of a dose of morphia as a general physiological antidote, as the recollection of cases of belladonna poisoning having been successfully treated on this principle by the President of the Royal College of Surgeons, during the time when I was a student in the Meath Hospital, flashed across my memory. (These cases I find, on reference, are fully detailed in the *Medical Press*, for 1862.)

"I accordingly injected—not indeed without considerable difficulty, owing to the delirious restlessness and tendency to pugnacity on the part of the patient—½ grain of the acet. morphia.

"The suspense which I had been in from the commencement of this alarming condition, and which now further augmented seemed to make minutes hours, was shortly relieved, as in less than five minutes, to my great delight, I observed the restlessness and jactitation cease, the skin to become warm, and the respiration fall to 20, while the pulse came down below 100, and was fuller. In a few minutes afterwards—ten altogether from the second injection—I was satisfied my patient was sound asleep, and in a fair way to spend a quiet night. After remaining in the house about half an hour longer, I took my leave, and in the morning I learned she had slept well, had taken a hearty breakfast, and that the neuralgia had entirely disappeared. After shopping for about an hour she visited me in my study in the afternoon; and with the exception of slight inconvenience arising from the still dilated condition of the pupils, she expressed herself as well as ever."

After referring to Dr. HARLEY'S elaborate investigation of the subject, Dr. FINNY says that no other conviction is forced on his mind than that opium or morphia is directly antagonistic to belladonna. And so strong is this conviction, that should such another case (similar to that above detailed) come under his charge, he would at once, and with much confidence, resort to the hypodermic employment of morphia.

As to whether the converse be equally true—that belladonna be antagonistic to opium, and that cases of poisoning by opium may be successfully treated by belladonna—however much he is induced to accept it in theory, he does not think sufficiently affirmative evidence has been adduced from which to draw any decided conclusion on the subject.

TRIFLING WITH LIFE.

Some weeks ago we took occasion to criticise, with a too moderate tone we fear, the therapeutic nihilism advocated by a speaker before a Massachusetts Medical Society. Our readers may remember that the orator regretted that cases of disease were not left to themselves more, free from all medication, so as to see "what will come of them."

This plan has been tried this summer in the Massachusetts General Hospital, and in the *Boston Medical and Surgical Journal*, Sept. 19, ten cases of rheumatism "without active treatment" are recorded; and we admire the audacious love of science which prompted the publication of that record.

The patients were chiefly young and middle-aged adults. Eight had never had rheumatism before, and of the remaining two, one had had but one attack. All that was given them for the disease was a few grains of citric acid at intervals, and some preparation of opium to relieve pain. We should think the results obtained would be very valuable, if physicians will but interpret them correctly.

Out of these ten cases, two (*twenty per cent.*) *died;* out of seven in which the heart was examined, it became diseased in *three:* the average duration of the disease was a little short of six weeks. Neither of the fatal cases had ever suffered from the disease before. The cause of death was diarrhœa and exhaustion; although the fact that in one case, on the day of death the patient had *twelve* grains of morphia injected subcutaneously within three hours and a half, the last dose being three grains, may offer sufficient reason in itself for such a termination. In this case the pericardial cavity was completely obliterated by recent yet quite firm adhesions, which could be separated, and left a thick, rough, opaque and somewhat hemorrhagic pericardium. The heart was pale and anæmic, the muscular structure sufficiently firm.

The convalescence in the cases that got well is described as "slow," "gradual," "lasting a long while," and "even and favorable."

Let us hope that this trial of "the expectant treatment" in acute articular rheumatism will be extensively read and pondered upon. We aid in giving it publicity

for that purpose. We want it to be the last of experiments in that direction.

Probably of all very painful diseases there is no one where intelligent and real treatment is more palpably and promptly beneficial than in this one. It is actually robbed of its terrors by modern therapeutics. As Dr. CHAMBERS says, it is one which it is a positive pleasure to treat, for we can effect so much comfort and secure such safety. And with all this at command, to witness *once* one-fifth of the cases die, nearly a half convalesce with diseased hearts, and an average of six weeks' sickness all round, ought to be enough for one generation of doctors to demand from therapeutic nihilism.

THE LABOR QUESTION IN ONE OF ITS SANITARY ASPECTS.

Whether any good can come of the reiterated demand of able-bodied adult workmen for constantly less work and more pay is gravely doubted. Every business where success depends upon personal endeavor requires, at least, ten hours a day of close application; and this much it does not hurt most men to give.

But when it comes to exacting labor from minor children, from undeveloped muscles, and soft bones, we must be governed by quite other considerations. Undoubtedly, France, which owes so much wealth and prosperity to its manufactures, also owes to them, that is, to the excessive labor of her children in the workrooms, her recent defeats.

Her statistics of military recruiting inform us, that of 325,000 young men conscripted during one of the late years, 109,000 were discharged for want of stature, diseased spine, or constitutional weakness. What, in this diseased and feeble contingent, are the respective proportions furnished by the agricultural and the manufacturing districts? To every 10,000 conscripts fit for service in ten agricultural departments, there were 4029 rejected, whereas in ten manufacturing departments the number of rejected was 9930. In the departments of the Marne, Seine-Inferieure and Eure, districts exclusively devoted to manufactures, the proportion has risen as high as 14,451 rejected to 10,000 thought fit for service.

The laws in that country do not prevent quite young children from being worked in the mills twelve to fourteen hours daily. Indeed, the mistaken policy has been to foster rather than to forbid the admission of children at a tender age into the labors of the loom and the furnace.

On the contrary, in Prussia, the legislation on this subject since 1837 has been definite and strict. Quite recently, in 1869, it was extended over the whole North German Bund. It decrees that children under twelve years cannot be regularly employed in mills; up to fourteen years they cannot work more than six hours, and must attend school three hours daily; from fourteen to sixteen years the day's work cannot be more than ten hours; the working hours must be between 5½ A. M. and 8½ P. M.; a rest of a half-hour in the morning, and of an hour in the afternoon, are obligatory, and during this time the children must take exercise in the open air; and the police is everywhere charged with the execution of the law.

How important such provisions are will readily be seen when we are told what toil these wretched little creatures are forced to undergo. Some years since, when this subject was discussed actively in England, Parliament ordered a commission which lasted four years. Grave facts were noticed. A pamphlet of the time, written by two Manchester deputies, contained startling revelations. The children were employed fourteen hours a day, from 6 A. M. to 8 P. M., winter and summer; they had to walk in the narrow space around their machines more than twenty miles every day; the heat of the factories was intense; the atmosphere they breathed was deleterious, and engen-

dered numerous diseases; of 269 children examined by a physician, 116 were sickly, and had their chests affected.

In consequence of this, a law was proposed by Sir James Graham, by which children under thirteen years are not allowed to work more than six and a half hours a day, either morning or afternoon, and three hours of school are necessary; children under eight years cannot be employed at all.

We have no facts at hand to show that any serious evil of this kind is rife with us; but with so striking an example of a nation so debilitated as France by devotion to industrial enterprise, without sanitary precautions, we should be on our guard.

Notes and Comments.

Detection of Hydrochloric Acid in Cases of Poisoning.

J. Bonis proposes, in the *Comptes Rendus*, to heat the suspected liquid from the stomach, previously strained, with potassium chlorate, in presence of a fragment of thin gold foil. The acid, if present, will set free chlorine from the chlorate, which will attack the gold. The presence of this metal in the solution may be detected by stannous chloride. Bonis has proved that alkali-chlorides, even in presence of the organic acids of the gastric juice, have no action on either potassium, chlorate or nitrate.

Guaranine.

This is the active principle of *Guarana*, the fruit of the *Paulina sorbilis*, which has been lately introduced into the materia medica from Brazil. Mr. John Williams read before the British Association for the Advancement of Science an improved method of obtaining it from the crude fruit. He is inclined to believe that guaranine differs in several important particulars from theine, with which it has been thought identical or nearly so.

Detection of Bismuth.

The substance is treated before the blowpipe with equal parts of potassium iodide and flowers of sulphur; in the presence of bismuth a scarlet coating of bismuth iodide is formed.

Mathematical Law of the Pulse.

Mr. A. H. Garrod, of London, has recently submitted the facts relating to the circulation of blood in man to a mathematical analysis. We extract from his work the following laws relating to the motions of the heart:—

Each cardiac revolution is divided into three parts, the systole, the diaspasis, and the diastole. The following law holds good regarding the length of these intervals.

1. The systole, together with the diaspasis, or in other words, the first cardiac interval, varies as the square root of the whole revolution.

2. The systole varies as the square root of the diastole.

3. The diaspasis is constant. It follows that the degree of cardiac nutrition varies directly as the systematic blood pressure, and as the square root of the diastolic time.

Hygienic Value of Flowers.

The old notion that odorous flowers are injurious to the health seems to have been overturned by some recent experiments of Professor Mantegazza. He found that flowers with powerful perfumes, such as the hyacinth, heliotrope, mignonette, etc., develop large quantities of ozone, and hence he attributes to them great hygienic value in the purification of the air in marshy districts. It also appeared that flowers with fainter perfume produce less ozone, and those which are odorless none at all.

Sounds made by Fishes.

M. Dufossé presented to the Academy of Sciences, Paris, last June, a curious note on the power possessed by certain fishes of the genus *cottus* to emit sounds. He traces it to the muscular tremulation or "contractibility of Wollaston," of the buccal muscles. This curious physiological property of muscular fibre has not been sufficiently studied by scientific men, and by some has been denied. These fishes, we may add, are of the kind popularly called toad fish, and are found also on the coasts of the United States.

The "Lunatics" of the Gospels.

Dr. Leslie thinks, from his examination of the Syriac and other versions of the Scriptures, that the "lunatics" mentioned in the New Testament were sleep-walkers, who were led to wander about by moonlight on the flat roofs usual in Oriental houses.

Rules for Cold Bathing.

Dr. WALTON, in his recent work on Mineral Springs, gives the following

RULES.

1. The most favorable *time* of day for taking a cold bath is on rising in the morning, or about noon.
2. The stomach should be empty when the bath is taken.
3. Exercise moderately before entering the bath, and while in the bath; but the body *must not* be overheated on going into the water.
4. A cold bath should not be taken when fatigued.
5. The *duration* of a cold bath should not exceed five minutes.
6. The cold bath should be succeeded by friction of the surface with a coarse towel or flesh-brush.
7. If the cold bath is not followed by reaction, the duration has been too long, or cold bathing is not fitted for the individual.
8. The cold bath is not adapted to feeble or aged persons or infants.
9. Persons whose extremities or skin are usually cold should not use the cold bath.
10. Persons affected with *organic disease of the heart* should not take cold baths.

Succus Scapi Taraxaci.

Mr. H. BARTON read a short paper on "Succus Scapi Taraxaci" before the British Pharmaceutical Conference. Dissatisfied with the usual variable preparations of taraxacum, in 1862 he collected some flower stalks in full bloom, and expressed from them the juice; gratified with the result, the following year the experiment was resumed, *rejecting the flowers*, crushing only the stalks, and adding 25 per cent. of spirit; after some weeks the liquor was filtered from the very small deposit, the resulting preparation remaining bright, and retaining its characteristic taste. From that time to this the juice has been prepared much in the same way, with the exception that on one occasion the spirit was added, and the crushed stalks allowed to remain twenty-four hours before submitting it to pressure, but without any appreciable difference in taste or appearance. The memorandum for the present year gives a fair average produce, crushing 237 lbs. scapes or stalks, and 63 lbs. flower heads; from the former were obtained 123 lbs. 4 ozs. juice, and from the latter 24 lbs. 3 ozs. This last, being inferior, is kept separate. Judging from the remarks of medical men and others who have taken it, the author of the paper has reason to believe that succus scapi taraxaci (entirely rejecting the flowers) is certainly one of the best, most uniform, and readily obtainable preparations of taraxacum.

Antidote for Arsenic.

Prof. CARLES found that sugar rendered the arsenite of magnesia soluble, and thus counteracted the desirable reaction of the magnesia. It was also noticed that with the exception of arsenic, the sugar did increase the antidotal reaction of the magnesia. A mixture of 2½ drachms of magnesia, 5 to 6 drachms of sugar, and 3 ounces of boiling water, is represented as being a very good composition of the antidote.

Rattlesnake Poison.

The poison of this reptile has been extracted while living, by Dr. HAYWARD, of Liverpool. Twenty drops was the average quantity yielded by each snake. It is of a straw color, thick and gummy, of acid reaction, readily soluble in glycerine and water, but precipitated by strong alcohol. Half a drop injected under the wing of a linnet produced death in three minutes.

What Instruments are Necessary?

A correspondent recently asked us this question. It is thus answered by a writer in an English exchange:—I have a profound conviction that a medical practitioner ought to possess a clinical thermometer, a stethoscope, microscope, and a uterine sound. He may do much successful work with these and brains, though he may add many other accessories.

Mixed Anæsthetics.

Dr. C. P. WHITEHEAD, of Lake Providence, La., writes us:—

Having tried the "A. C. E."* anæsthetic spoken of in your journal a few issues back, and being highly pleased with it, I feel it a professional duty to add a mite to the statistics of the compound.

I have used it four times since the article was published, for the extraction of teeth, and have seen it used once by Dr. BELL, for

* Alcohol, 1 part; chloroform, 2 parts, and ether 3 parts.

the same purpose. In every instance the patient came rapidly under its influence. In no case was there nausea. In no case was there any unfavorable symptom. In no case but one did it occupy more than ten minutes from the first inhalation until the patient was completely recovered. If I discover anything unfavorable in regard to it it will be promptly reported.

The London Hospitals.

Dr. E. H. TRENHOLME writes from London to the Canada *Medical Record*:—

The enormous hospital accommodation of this city cannot but be forcibly impressed upon the mind, and when we consider that by far the greater proportion of these are almost entirely supported by voluntary contributions, one cannot but be more surprised still that they are in successful operation. Medical men connected with these institutions tell me that there is scarcely a family in London but contributes largely each year, and that they consider the hospital subscription a debt of honor.

I would like to draw the attention of the people, as well as the profession in Montreal, not only to what I have said about the attending staff, but particularly to the rules governing the period of tenure of House officer, viz., to three months.

The supporters of hospitals here seem to take a more extended view of the subject than elsewhere. The entire and only object of such institutions with them does not seem to be the *present* relief of the inmates, but, with a wise forecast, to prepare, as best they may, a *large* number of medical men who, after practical acquaintance with disease in the hospital, shall go out prepared for their life work.

Prediction of Sex in Utero.

Dr. T. J. HUTTON, of Long Island College Hospital, Brooklyn, New York, reports, in the New York *Medical Journal*, seven cases in which he was able to diagnose correctly the sex, part presenting, and position, by auscultation. The rule employed was a modification of those advanced in recent text-books, viz.: fœtal pulsations heard *below* a horizontal line dividing the uterus into two equal parts denote *vertex presentation; above* it, *breech presentation; below* this line, and to the *left*, first position; *below* it, and to the *right*, second position. When the fœtal pulsations number 144 a minute it is a female; 124 a minute, male. A variation of six beats upward from 124, or downward from 144, will not endanger the diagnosis, provided auscultation be practiced in the *ninth month of pregnancy*. The seven cases were the only ones in which the Doctor had an opportunity of testing it, being the sole guide, and without a failure.

Is Alcohol a Tonic?

As regards the *strengthening* properties of alcohol, the late Dr. William Brinton, of London (1861), settles this point in the following terms: "Careful observation leaves little doubt that a moderate dose of beer or wine would, in most cases, at once diminish the maximum weight which a healthy person could lift; mental acuteness, accuracy of perception, and delicacy of the senses, are all so far opposed by alcohol as that the maximum efforts of each are incompatible with the ingestion of any moderate quantity of fermented liquid. A single glass will often suffice to take the edge off both mind and body, and to reduce their capacity to something below their perfection of work." This has the more force, as not only was Dr. Brinton probably the very highest authority on the physiology and pathology of the digestive organs, but he was also so far from being a "teetotaller" that he followed the English custom of always having wine on his dinner-table.

Thapsia Resin.

A study of the plant producing the Thapsia resin, lately so much employed in France, has induced M. CAUVET to recognize in it the *σιλφιου* (hitherto supposed to be assafœtida) of the Greeks, or Laserpitium of the Romans. The resin is an admirable counter-irritant, more effective than cantharides or croton oil, and it deserves the attention of our enterprising English pharmacists, to whom a novelty is a thing of value. The plant, *Thapsia garganica*, grows abundantly on the sandy shores of Algeria, and the resin is commonly used as a vesicant and external stimulant by the Arabs, who call it Bon Nâtâ, or the father of good.

Antidote Against Carbolic Acid.

TH. HUSEMANN recommends sugar-lime, prepared by dissolving 16 parts of white sugar in 40 parts of water, digesting with lime for three days, filtering and evaporating.

Correspondence.

Vaginal Tumor.

Eds. Med. and Surg. Reporter:

While on a visit to my former field of labor in Union county, Pa., I was called to see Mrs. D., who was then said to be dangerously ill.

A short time previous to my arrival there was a large fibrous tumor expelled from the vulva.

On examination per vaginam, I found the uterus in its normal position; size, that of the unimpregnated viscus, the os being nearly closed.

Finding this state of things, I inclined to think this abnormal body was a vaginal growth, and not a uterine one.

Having expressed this as my opinion, the mother of Mrs. D. at once confirmed this opinion by saying that nine months ago something was coming from her, which was thought to be the womb. Dr. P. pushed it back, supposing it to be a prolapsed uterus.

Upon examination I found the monstrous thing was a fleshy, fibrous mass, cardiac in shape, vertical diameter five inches, transverse three and one-half inches, having two pedicles at its base, containing a dead fœtus two inches long, cord eight inches, being located with its placenta at the base of the said mass or tumor.

Now, judging from its shape, the two pedicles, and the fact that nine months ago a fleshy mass was forced high up into the vagina, which remained there during these nine months, giving almost constant trouble and annoyance, the most rational solution of this singular case is, that the mass containing the dead fœtus was expelled from the uterus into the vaginal canal (probably much smaller in size than now), retaining its vitality during these nine months by reason of the two pedicles whose distal attachments were in the uterine cavity, whence also was derived the nutriment by which the tumor was developed, the fœtus having perished at the time of its expulsion from the uterus.

D. H. Miller, M. D.,
Fifth and Coates streets.
Phila., Sept. 26, 1872.

News and Miscellany.

Midwifery in Russia.

It is stated that the Emperor of Russia has just issued a ukase ordering the immediate establishment at St. Petersburg of a school to train midwives, as up to the present time no such institution had existed anywhere in that immense empire. The curious part of the matter, however, is that the direction of this school is placed in the hands of the Minister of War, who, under date of the 10th of August, published the regulations of the institution and the programme of the studies. This anomaly results from the fact that the new school is subordinate to the Academy of Medicine and Surgery at St. Petersburg, which is also under the control of the War Department.

Small-pox on the Pacific Coast.

The Mayor of San Francisco has received a communication from the United States Consul at Callao in reference to the ravages of the small-pox on the South Pacific Coast. The Consul says the disease is more malignant and destructive to life than the ordinary small-pox, and that out of fifty-eight patients admitted in one week to the hospital in Santiago, Chili, fifty-six died. As there are eight or ten small-pox hospitals in Santiago, some idea may be formed of the destructiveness of the pestilence.

Prehistoric Man.

The Congress of Prehistoric Archæology met last month (August) in Brussels. At its close M. de Quatrefages summarized the result of the discussions to be, principally, that the elements of the prehistoric populations, even of the age of stone, are discernible in the present population, and do not consequently point to any change in species.

Theobromin has been found in a tea-plant which grows within the Himalaya Mountains. The leaves contained Thein and Theobromin.

Effect of Digitalis.

Dr. Edes, in the Boston *Medical and Surgical Journal*, says Bohm has reinvestigated the complicated subject of the action of digitalis. We have space only for his most important conclusions. Digitalin brings the inhibitory nerve centres situated in the heart into a condition of increased excitability. It has a peculiar specific action upon the heart-muscle itself, in the first stage strengthening its contractions, in the second making them irregular, and in the third bringing it to a condition of peculiar rigidity or tetanus. He thinks that the digitalin does not cause a contraction of the arterioles, but that the increased pressure in the arteries is due to the increased force of each pulsation of the heart.

Eight Children at a Birth.

The Boston *Medical and Surgical Journal* is responsible for the following:—

On the 21st of August, Mrs. Timothy Bradlee, of Trumbull County, Ohio, gave birth to *eight* children—three girls and five boys. They are all living, and are healthy, but quite small. Mr. Bradlee was married six years ago to Eunice Mowery, who weighed 273 pounds on the day of her marriage. She has given birth to two pairs of twins, and now eight more, making twelve children in six years. Mrs. Bradlee was a triplet, her mother and father being twins, and her grandmother the mother of five pairs of twins.

Health of the Port of Philadelphia.

The Quarantine Master at the Lazaretto, who took down his flag for the season on Monday evening, September 30, reports the season from June 1 to October 1 as the healthiest for many years, as there has not been a single case of serious illness or contagious disease at the station or brought into the port by any vessel.

Effect of Linseed.

Several physicians in the British *Medical Journal* record instances of idiosyncrasy where asthmatic symptoms are induced by the smell of linseed meal. Ipecacuanha is a frequent cause of similar symptoms.

MARRIAGES.

WHITAKER—YERKES.—September 18th, by Rev. A. J. Hay, at the residence of the bride's parents, Mr. Andrew R. Whitaker, of Hellertown, Pennsylvania, and Miss Annie M., only daughter of H. Yerkes, M. D., of Phœnixville, Pa.

BARNWELL—CHAPMAN.—In Cincinnati, Ohio, September 3d, by the Rev. C. H. Taylor, D. D., Mr. W. E. Barnwell, of Philadelphia, and Miss Saida C., daughter of Dr. W. B. Chapman, of Cincinnati.

BRUMLEY—TOMPKINS.—At the residence of the bride's parents, Stony Point, New York, September 25, by Rev. Nelson Millard, Dr. John D. Brumley, of Newark, New Jersey, and Phebe, daughter of Hon. Daniel Tompkins.

JOHNSON—ROE.—At the bride's residence, Fulton, Oswego county, New York, September 11, Dr. Lawrence Johnson, of New York City, and Miss S. Addie Roe.

LONGWELL—ELLIOTT.—By Rev. T. J. Milford, September 5, Dr. L. C. Longwell and Miss E. J. Elliott, both of Clarion county, Pennsylvania.

OKIE—MICKLE.—September 4, by the Rev. Dr. Garrison, at the Church of the Epiphany, Camden, New Jersey, Richardson B. Okie, M. D., and Clara, daughter of the late Isaac Mickle, of Camden, N. J.

PATRIDGE—PEASE.—In Charlotte Vermont, September 11th, by Rev. C. C. Torrey, assisted by Rev. L. C. Patridge, H. T. Patridge, M. D., of New York City, and Miss Mary E. Pease, of Charlotte.

ROCKWELL—HAMMILL.—At Utica, New York, September 12, by Rev. J. E. Rockwell, D. D., of Staten Island, Frank W. Rockwell, of Brooklyn, N. Y., and Lizzie T., daughter of C. Hammill, Esq.

TAYLOR—GRIER.—By Rev. J. Mateer, assisted by Revs. John Wray and W. H. Filson, September 3d, Dr. J. A. Taylor, of Hamburg, Iowa, and Miss Hannah A. Grier, of Curllsville, Pennsylvania.

TORRY—MOSELEY.—At Cazenovia, New York, August 28th, by the Rev. G. S. Boardman, D. D., the Rev. David Torry, D.D., and Mrs. Georgiana Moseley, daughter of Dr. D. Mitchell, of Cazenovia.

DEATHS.

BARTRAM.—In Philadelphia, August 31st, Amie Griffiths, daughter of Doctor Thomas S. and Mary A. Bartram, aged 2 years and 22 days.

BLAKE.—At Long Branch, N. J., September 17, Dr. Lewis Blake, of Philadelphia, in the 46th year of his age.

BROOKS.—In St. Johnsbury, Vermont, August 2, of dysentery, Walter Ellis, aged 9 months, son of Dr. S. T. Brooks.

CASE.—At Forestville, Connecticut, September 20, Augustus R. Case, M. D., aged 66.

COLEMAN.—At Latrobe, Pennsylvania, August 5, Edward Jenner, only son of Dr. W. C. and B. J. Coleman, aged 2 months and 17 days.

FLAGG.—On the 8th of September, Dr. J. F. B. Flagg, a distinguished dentist of Philadelphia, aged 68 years.

HENSCHEL.—At Zurich, Switzerland, on the 18th of September, Dr. Charles Henschel, of Philadelphia, in the 64th year of his age.

PEPPER.—In Philadelphia, September 14, George Pepper, M. D., in the 32d year of his age.

RIX.—In Royalton, Vermont, September 5, Levi Rix, M. D., aged 76.

ROGERS.—In Charlestown, Massachusetts, at the home of her son-in-law, Sherman Paris, Esq., Mary, wife of Dr. Samuel W. Rogers, late of Quincy, Illinois, aged 57 years.

RUMSEY.—On September 1st, at Wethersfield Springs, of typhoid fever, in the 23d year of his age, James Caverly Rumsey, only son of Dr. James S. Rumsey, of Fishkill, on Hudson.

SCHENCK.—At Matteawan, New York, September 7, Dr. John P. Schenck, Sr., in the 75th year of his age.

SIMMONS.—September 7th, Seward Gould, infant son of Dr. Charles E. and Ruby G. Simmons, aged 18 months.

WHITE.—In Loran, Illinois, August 31st, Mrs. White, wife of Dr. L. C. White, Mayor of Van Buren, Arkansas, aged 53 years. Mrs. White's death was caused by being thrown from a carriage, and receiving a fracture of the skull.

OBITUARY.

Dr. Jacob Tichenor.

At a meeting of the physicians of Owensboro, Kentucky, Dr. Hall being called to the chair, and Dr. Todd appointed Secretary, the following resolutions were passed in respect to the memory of Dr. Jacob Tichenor, who died at his residence, nine miles south of Owensboro, September 12th, of typhoid malarial fever, in the forty-second year of his age:—

Whereas, We have learned with regret of the death of our professional brother, Dr. Jacob Tichenor; therefore

Resolved, That in his death the medical profession and the community have lost one of its most useful, beneficent, and esteemed members, who by his courtesy, gentlemanly deportment, and scientific attainments, had obtained an honorable position in his profession, and in the community in which he lived; in a word, he was an estimable physician and a Christian gentleman.

Resolved, That in professional intercourse he was distinguished for ability, modesty, delicacy of feelings, and a faithful regard for ethical honor, rendering him eminently worthy of the respect and love of his brethren.

Resolved, That in acknowledging the excellence of him who is gone, and in honoring his memory, we would tender to his relatives and friends, in their sorrow, our respectful sympathy.

Resolved, That a copy of these resolutions be published in the city papers and the Philadelphia MEDICAL AND SURGICAL REPORTER.

THE

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Communications.

SYMPTOMS AND TREATMENT OF VARIOLA.

By Fred. Horner, Jr., M. D.,
Of Virginia.

HISTORY.

In the Bible, among other curses which it is declared the Almighty would inflict upon the Jews, for disobedience, the "scab" is specified. "The Lord will smite thee with a scab, whereof thou canst not be healed." Small-pox has long been prevalent in the East, and proved to be very fatal to the soldiers of the Crusades, about which time it was first studied by the modern pathologist. Subsequently, a plan of prophylactics was suggested by a distinguished English woman, Lady Wortley Montagu, who acquired from the Turks the knowledge of inoculation. Afterwards the immortal Jenner proposed the induction of vaccinia, or the introduction of a mild poison into the circulation, in lieu of the virus of small-pox, which had for centuries proved so very fatal to the human species. Variola became epidemic in Philadelphia in 1827, when a committee of eminent physicians reported on the nature of the disease through the columns of the *American Medical Recorder*. In 1838 it prevailed in London. At Marseilles, of the 8000 who were not vaccinated, one-half took the disease, and one in every four died. Among the 30,000 vaccinated 2000 had small-pox.

Watson's "Practice of Physic" declares that "no contagion is so strong and sure as small-pox, and that none operates at so great a distance," and when epidemic, is most fatal. Modified variola or varioloid is defined to be variolous fever without eruption. I have seen a single exception, which was attended by an eruption in a person of intemperate habits and who had been greatly exposed to the weather.

SYMPTOMS.

The writer has encountered the disease in the epidemic form on two occasions, viz.: on board the U. S. S. Jamestown, on the Brazil station, and during the late war at a general hospital in Washington City, when it was marked by the following symptoms: fever, vomiting, and lumbar pains, which lasted until the third day. The eruptive, or second stage, began with a rose-colored efflorescence of the face, the neck and trunk, followed by papulæ which developed into round, flattened, and umbilicated pustules on the sixth, and as late as the eighth day. During the period of maturation the symptoms of fever decline, and the body exhales a peculiar and offensive odor resembling the refuse of putrid meat exposed to the atmosphere. The swelling of the face in this stage becomes so great as to obliterate the features. About the ninth day the secondary fever occurs, and lasts for three or four days, when the process of dessication commenced, and the declining or convalescent stage is established. The eruption attended by inflammation may extend to the larynx and trachea, producing cough, and even extinction of the voice. Deglutition becomes painful from the inflamed state of the fauces and thickening of the epiglottis. Under these circumstances the danger from death by apnœa, due to effusion,

inflammation and closure of the rima glottidis is very great. In cases of confluent small-pox, erysipelas and troublesome abscesses are frequent complications. The nares become closed, and the patient can breathe only through the mouth. The bronchi and lungs sympathize with the general disorder. In one example I knew purulent ophthalmia to be so violent as to result in sloughing of the cornea and the destruction of the sight of one eye. Without exception, it is, when fully developed, the most loathsome disease to which mankind is liable.

TREATMENT.

With respect to this subject, reference to the details of a few cases may be interesting.

Case 1. A sailor, by the name of Rogers, introduced the disease on board of the Jamestown. While "on liberty" in the port of Buenos Ayres he was exposed to the contagion; the weather at the time was cold and damp, and the crew had suffered from influenza. The patient was at first treated for the latter complaint. On the fifth day symptoms of variola of a malignant confluent form were fully developed. The face was greatly swollen, and covered with a vesicular eruption, attended by intense itching, dyspnœa and delirium during the night. The eyelids were very painful from inflammation. After the use of purgatives and anodynes, the plan of treatment first suggested by Sydenham was adopted, viz.: the free use of refrigerants, mucilages, sponging the surface with cool or tepid water, and an abundant supply of fresh air without admission of the light. The nervous symptoms were allayed by solutio sulph., morph., McMunn's Elixir, or Hoffman's Anodyne. Lime juice, the product of the unripened lemon, which is much used as a cooling drink in the Tropics, was refreshing to the patient. As soon as possible, the senior surgeon, Dr. J. M. Foltz, now Surgeon General of the Navy, had the patient removed to the Spanish Hospital, at Buenos Ayres. In vain was every precaution taken to protect the crew; the disease spread from the steerage to the forecastle, infecting both officers and sailors, and presenting every form of variola. Proofs were furnished that it was communicated by the inhalation of an atmosphere tainted with the exhalations of a person already affected with it.

In cases where the eruption was slow in coming out, the pock flattened and was without proper pus, and the skin excoriated and bled after scratching, the prognosis was not favorable. To prevent ulcerative destruction of the true skin and pitting, the pustules on the face and other exposed surfaces were cautiously evacuated and touched with argent. nitras. Mucilago ulmi is a good demulcent application to the ulcers, which are very painful and require nice handling. Unlike cold cream, the mucilage undergoes no chemical change. Soft pledgets of cotton, steeped in oleine, also answer a good purpose to allay the itching. In the formative stage of the eruption, and previously, the free use of unguents of fresh lard or sweet oil, applications which have been resorted to in the treatment of scarlatina, will be found to be highly advantageous.

On the accession of the secondary fever, usually about the eighth day and later, there is great restlessness, due to sympathy of the constitution with the local disorder; large opiates are demanded; opium in the solid form is to be preferred. Confinement of the hands by bandages, to prevent scratching, becomes necessary.

About the tenth day of the eruption dessication has begun on the face, contemporary with the formation of pocks on the arm and body. The fetor is now greatest, and is first perceptible to the patient himself. The eschars on the face become black and hard; here and there are whitish spots. On the hands and extremities the pocks are roundish and of a cream color. On the palms of the hands the spots resemble extravasations of blood beneath the cutis. The occurrence of pustules on the mucous membrane of the eye covering the cornea will sometimes cause blindness. When accompanied by high fever, a dry and black tongue, hot skin and delirium, the prognosis is very unfavorable. In one instance I knew opacity of the cornea to follow from the poison of the virus being accidentally applied to the eye. Rupia is another sequela of the disease, and is very painful; the ulcers then discharge a dark colored, unhealthy pus, the evacuation of which increases the pain. In this advanced stage recourse should be had to stimulants and tonics, viz.: the mineral acids, quinine and iron, milk punch, eggs and beef-tea. Goulard's cerate should be applied locally, and disinfectants, solutio chlorinata and carbolic acid sprinkled about the apartment.

The patient should never be given over.

I have seen them lying comatose and entirely unconscious, the features obliterated, and the face a mass of suppuration, and pulseless, and afterwards recover. The emaciation is often very great; slowness of speech and deafness always indicate great prostration of the vital powers.

Case 2. A midshipman. He was admitted with symptoms of violent delirium, loss of consciousness and fever. After copious venesection and warm bath the symptoms abated, and on the third day the characteristic eruption appeared. This case illustrates an exception to the usual treatment, and proved the value of prompt and active depletion, and may be recommended as a substitute for that of Doctor J. R. Beck. In the late October No. of the *American Journal of the Medical Sciences*, this author has written an article entitled "History of a Remarkable Case of Modified Variola." Dr. Beck says, "the most curious phase of the disease was the delirium. Nothing seemed to produce any alleviating effect, and the solution of the hydrate of chloral, nineteen doses, each containing thirty grains, and five grains of the bromide of potassium, proved unavailing to relieve the patient." The lancet would have accomplished this result, according to my experience. The prevention of variola lies in prompt vaccination, repeated in the case of adults when the disease prevails as an epidemic. At the present time children appear to be the greatest sufferers. I may close with the observation that the time intervening between the reception of the virus into the system and the first stage of primary fever is nine days, the average being, according to the books, between eight and twelve days. An epidemic tendency certainly prevails, and irregular and intemperate habits, with neglect of vaccination, must prove to be strong predisposing causes of variola.

Query? Why is variola more fatal during the winter season?

PRACTICAL NOTES. — CONGESTIVE CHILLS.—HÆMATURIA.

By W. W. Alexander, M. D.,
Of Athens, Tenn.

My custom, when a congestive chill is threatened, is to precede the use of quinia by an emetic, or mercurial cathartic, with a view to relieve the portal circulation. Quinia is more efficient when its exhibition is preceded by attention to an engorged liver. I have found counter-irritation and revulsives useful, also sinapisms, and stupes of turpentine over the stomach and hypochondriac region, when there is congestion of the stomach, as indicated by pain, vomiting, etc. A blister to the epigastrium will generally give prompt relief to the gastralgia, and greatly facilitate the cure of the intermittent.

The following I find effective to break up "chills and fever:"—

℞. Quinia,	grs. iij.
Ferri carb., p.,	grs. ij.
Piperin,	grs. j. M.

S. For one dose. Repeat at intervals of four hours, during the absence of fever.

During fever I usually administer Tinct. Gelsem., ♏ xx, at intervals of two hours, or until fever abates, diminishing the dose, or lengthening the intervals, as circumstances may indicate. Three or four doses of each ℞. will usually be sufficient. Nit. ether makes, in some cases, a good addition to the Tr. Gel. I usually follow the quinia with liq. pot. arsenit. ("Fowler's solution"), which I direct in six-drop doses three times a day (varying the dose to suit age or condition of patient), to be taken in a little sweet milk or mucilage, after eating, and continued for one week. Then suspend for five days, after which resume for three, and so continue for three or four weeks, so as to cover, each week, during the three days it is taken, the day upon which the chill last occurred. When there is much *anemia* I like the phosphate of iron. The mur. tinct. suits some cases, well combined with c. tinct. of gent., administering the gent. before and the iron after eating. So much for my treatment of malarial fever, as usually occurring in this locality. Of course, when congestion is very great or threatening, reaction slow and feeble, larger doses of quinia will be required. I have sometimes used chloroform to prevent a chill; dose, one teaspoonful, well triturated with sugar, and diluted with milk or water.

I recently successfully tested the efficacy of dilute acetic acid for dissolving coagulum in the bladder of a patient who has long suffered from hæmaturia. After removing the broken-down clots I syringed the bladder with tepid water, to which was added carbolic acid, in the proportion of two drops to the fluid ounce, held in solution with

glycerine, followed for a day or two with a very weak solution of sulphite of soda, which corrected the horrible fetor previously attending the withdrawal of the urine and decomposed blood. This patient is an old gentleman, æt. seventy-three years. First hemorrhage occurred about two years ago, preceded by aching and tenderness about the lumbar region, and rigor, treated by aperients, rest, and counter-irritation. Subsequently an attack occurred while attending "Tatis Springs," a watering-place of some resort in Upper Tennessee, while there or in that neighborhood, for he started home, and was necessitated to stop a few miles from the Springs. He suffered from retention for five days, somewhat relieved by profuse diaphoresis. The attending physician failing to enter the bladder with a catheter, counsel was summoned from Knoxville, when catheterism was successful. He was then almost moribund. Several quarts of offensive urine were withdrawn, after which he slowly recuperated; but the bladder, from over-distention, remained paralyzed. On his return to Athens, his home, some months ago, he still suffered from hæmaturia upon the least exertion.

Upon examination I found the prostate gland enlarged (a frequent complication in old men). For this I prescribed iod. pot., and as a tonic, hydrastis can. He was suffering from anorexia. The hydrastis improved his appetite and strength. I directed carriage riding, a nutritious but easily digestible character of food, avoiding hot bread, fried victuals, and stimulants; and for the hæmaturia fluid extract of ergot, muriatic tincture of iron, buchu, uva ursi, turpentine, copaiba, etc., were all in turn used with but partial, if any, benefit.

His malady was much aggravated by a long trip in the country during inclement weather, necessitating confinement in the house for several days, which he left one evening when the atmosphere was damp and cool, to attend the nuptials of a son. On his return home, late in the night, he was thoroughly chilled; could not succeed in drawing off his water; sent for me next day; found him with a hard rigor; urethra very sensitive; difficulty in introducing smallest catheter; bladder much distended; diagnosed coagulum; nothing followed the introduction of the catheter but a few drops of blood. Supposing the catheter might be stopped up with coagulum, I syringed it; still no flow. I then resorted to the acetic acid, as I had seen recommended by some contributor to *Nelson's Lancet*, a Canadian journal, some years ago. To prevent a return of the difficulty, relieve local congestion, and give tone to the bladder, I telegraphed to Knoxville for ice, and kept a bladder constantly filled, and at intervals of one or two hours frequently applied it to the perineum, and occasionally above the pubis, for several days, until the hemorrhage was completely relieved. I also introduced pieces of ice in the rectum, as suggested by some writer in your journal a few weeks ago. Since then the old gentleman has been taking Fowler's solution, in five-drop doses, three times a day, with apparent good effect. He was at my office the other day. Reported himself as improving in strength; free of pain; able to pass a little water through the day the natural way; uses the catheter only at night, before going to bed; thinks he will soon be able to dispense with it entirely.

I neglected to mention that I gave him nux vomica, with a view to its contractile effects on the muscles of the bladder. He has had no return of hæmaturia now for several weeks. While I write he calls to see me, looking every way much improved; says he feels better than he has done for many months; still finds it necessary to resort to the catheter sometimes, usually once or twice during the twenty-four hours. A medical friend, an old acquaintance, and a relative of his wife (Dr. J. G. M. Ramsey, a gentleman of some literary reputation, author of "Ramsey's Annals of Tennessee," etc., and for more than half a century a practitioner of medicine), recommends him to use gin. Mr. G., my patient, calls to know if he shall do so. I advise him to let well enough alone, for the present; promise permission to take the gin cautiously, in a few days, if I think it should then be indicated. I also direct a pint of cold water to be thrown up the bowel every day.

RECENT RESEARCHES OF PROF. BROWN-SEQUARD ON EPILEPTOID CONVULSIONS.

At the stated meeting of the New York Pathological Society, Sept. 25th, Dr. Brown-Sequard gave, in a brief manner, some new facts in regard to the production of epilep-

told convulsions in animals, especially the Guinea pig.

The first animal exhibited had been operated upon so as to expose the spinal cord. This operation in the Guinea pig, as was long ago demonstrated by the speaker, is almost invariably followed by convulsive attacks similar in three essentials to those of epilepsy in the human subject. By irritation of what the doctor calls the epileptic zone, the skin of the neck near the ear, convulsions can be produced at will; the movements last from thirty to sixty seconds. Animals so operated upon never recover, the injury is irreparable, and after some months death takes place. A recently discovered and very interesting fact with regard to the production of these convulsive movements in the Guinea pig is that injury to other nerves will be followed by phenomena similar in all respects to those produced by injury to the spinal cord.

Division of the sciatic nerve in the Guinea pig produces results similar to, if not identical with, those produced by injury of the spinal cord.

In this pig, remarked the professor, the sciatic nerve has been divided quite recently. I now irritate, by pinching, the skin of the neck, and you notice that the animal is thrown into violent convulsions of short duration.

Another animal was exhibited, in which the operation had been done some time ago. In this animal the convulsions could be produced with difficulty, as recovery was beginning to take place.

Another one was shown, nearly well, in which, after powerful pinching of the epileptic zone, no convulsions resulted. In these animals recovery takes place when the divided nerve is re-united. You will observe in two of these pigs that the toes of the leg supplied by the divided nerve are gone; the animal itself has eaten them off. The explanation of this fact is very simple: sensation of the part is abolished, and the pig eats it, just as it would anything else that came in its way. Here you notice one toe is left; it is supplied with *sensation* by a branch of the crural nerve, and has, therefore, escaped destruction. I have said that animals, after a certain length of time, recover. This is shown by increased sensation in the epileptic zone, and by the falling off of the hair at the same spot. And now comes a very remarkable fact. These peculiarities or traits induced by this operation are *transmissible*. The young of the toeless father or mother, when also born without toes, are liable to convulsive seizures precisely similar to those of the parents, and recovery is preceded by falling off of the hair at the epileptic zone.

The facts show the wide range of phenomena produced when the nerves are injured, and no one observer, no matter how diligent, is capable of interpreting them. In conclusion, Dr. Sequard urged upon the younger members of the profession the necessity of aiding him in these investigations. The operations are simple, the results manifold and complex, and need careful observation and truthful record.

Dr. Sequard will, at an early date, give a series of lectures upon the results of his recent researches. M.

REMARKS ON DR. HIRAM CORSON'S REPORT ON "LIGATION OF THE FUNIS," IN THE "TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA," AT ITS SESSION HELD IN JUNE, 1872.

By A. F. A. King, M. D.,

Professor of Obstetrics, etc., in the National Medical College at Washington, and in the University of Vermont; one of the attending Physicians to Providence Hospital, Washington, D. C.

It is to be regretted that in the report referred to at the head of this article, Dr. Corson (who has certainly given us some valuable contributions to medical literature) adopts a mode of argument (if argument it can be called) which must effectually cut off all discussion and leave him with the field to himself, to soliloquize over his own vastly superior knowledge of the subject on which he writes.

In referring to my Essay, published in 1867, he speaks of my "*pretended facts;*" he reads a paragraph, and "*cannot see one word of truth in it.*" Such expressions are of little scientific value; they do not deserve criticism.

In whatever degree the opinions expressed in my Essay five years ago may be susceptible of improvement, they can never be controverted by the palpable misrepresentations of facts and misconstructions of language with which the Doctor's report so lavishly abounds. Not once has he quoted me correctly, and *italics* have been used and

omitted as best suited his purpose. In the following quotation from page 29 of my brochure: "At birth, and for a certain period prior to it, the circulation of blood through the placenta has in part or wholly ceased; *this we know, for the fœtal pulse felt in the cord no longer* reaches the placenta," there are no italics, but Dr. C., by adding them, endeavors to extort from the words the meaning that pulsation *is no longer felt in the cord*, a misconstruction altogether too palpable to need comment.

Again he quotes from page 32 of my Essay thus: "Is it natural and proper that the cord should pulsate, and pulsate strongly and throughout all or a greater part of its length, after the child is expelled." In this rendering he leaves out the word "strictly" and also the italics. The language in the original reads as follows: "Is it strictly natural and proper that the cord *should* pulsate, and pulsate *strongly* and throughout *all* or a *greater part of its length*, after the child is expelled?" Dr. Corson regards this language as implying that pulsation is not felt in the cord after delivery, and laments the limited experience of one who should entertain such an opinion.

As a further illustration of the manner in which Dr. C. understands English, he makes the following quotation from page 534 of Neill & Smith's Compend: "The two ligatures are useful in case of twins, which sometimes have a common placenta," and construes it to mean that the fœtal and maternal circulations are continuous.

It is after such misconstructions as these that the Doctor ascribes to me the opinion that the cord ceases to pulsate some minutes before birth; that it ought to be cut quickly after delivery, etc.; a conclusion as far from the truth as that Drs. Neill and Smith advise tying the cord of the first child in a case of twins, for fear that the mother's blood should come streaming through it.

My Essay is out of print, but I have a dozen or more copies on hand which I shall be pleased to distribute to any readers of the "Transactions" who may wish to disabuse themselves of the errors in regard to my opinions which they may have imbibed from the Report of Dr. Corson.

Editorial Department.

Periscope.

On the Value of Cardiac Murmurs.

Dr. John E. Lockridge writes to *The Georgia Medical Companion*:—

The experience and investigations of the past ten years have wrought a wonderfully wholesome change in the minds of practitioners in regard to a great many of these murmurs. Murmurs that once gave rise to the most fearful forebodings are now known to be of very trifling importance.

The following are some of the conditions in which we hear these murmurs, viz.: anemia, chlorosis, chorea, hysteria, spinal irritation, fatty degeneration of the cardiac parietes, irritable heart, paralysis, etc., etc.

It is clearly my opinion that two pathological conditions, and only two, give rise to all these murmurs, viz.: hypertension-contraction-spasm of the columnæ carnæ, and hypotension-flaccidity-paralysis of the same. It is only necessary for me to give the merest sketch of the structure and functions of the fleshy columns, tendinous chords (*chordæ tendinæ*), and their attached valves. The fleshy columns are the muscles of the valves, and the tendinous cords are the tendons of these muscles, and are also attached by the other extremity to the valves. It is very readily understood in what manner the valves are opened and closed by a successive contraction and relaxation of these fleshy columns in their strictly physiological condition, the columns and tendons being exactly suited in length to reach the auriculo-ventricular foramina, and the valves being precisely suited in size to their openings.

Now, it is perfectly apparent that these columns and cords cannot perfectly subtend the distance to the foramina if the former be in a condition either of excessive or diminished tension; for in the latter case the valve will be allowed to recede into the corresponding auricle, and in the former condition it will be arrested by the cords before it reaches the auriculo-ventricular foramen. In both of these conditions there will be a regurgitation of blood from the ventricle to the auricle, through the imperfectly closed valve, and the resultant cardiac murmur. So it is very plain that in case we have either excessive condensation, or spasm, tonic or clonic of the fleshy columns; or, on the other hand, excessive relaxation or

paralysis of the same, we have a murmur. It will be seen from the foregoing remarks that the immediate cause of systolic regurgitant murmurs *alone* have been accounted for by the opposite two lesions in question. And, in truth, from a practical stand-point, very little need be said in regard to diastolic functional murmurs; for they are seldom heard, and never, to my recollection, by me. Williams is cited, twenty years ago, as saying that five-sixths of the murmurs that he had met with were not only regurgitant, but mitral regurgitant; and that, too, at a time when the scope of the bellows murmur was limited almost exclusively to organic diseases of the organ.

I do not wish to be understood as attributing the cause of these functional murmurs solely to increased or diminished tension of these fleshy columns; for the cause is doubtless composite to some extent, the same pathological conditions extending to, and influencing and controlling the action of the valves themselves, as well as the cardiac parietes. I believe, however, that the fleshy columns act by far the most prominent part in the production of the abnormal sounds.

So far as my observation goes the murmur has invariably been mitral regurgitant, that is, systolic, below, and to the left. And how does my philosophy accord with the anatomy and physiology of the heart? The parietes of the left ventricle are three times as thick as those of the right; the columnæ carnæ are much more fully developed, and this is especially true of the *columnæ papillares*, of which there are only two, one of which is attached to each mitral valve at one extremity, by means of its tendinous cord; and by its other extremity to the walls of the ventricle. Now, it is very evident to me that if a part or organ is more strongly developed than another organ, in order that it may be adequate to the performance of a more arduous function, it will surely follow that a failure of this part to perform its duty, or a disposition to take upon itself a work of supererogation, will be attended with more manifest results. And this is precisely true of the right and left sides of the heart; as well as of its systolic and diastolic action; and we would surely expect the mitral regurgitant murmur much more frequently from the foregoing pathological conditions.

I have already alluded, incidentally, to the most frequent remote causes, or *causæ causarum*, of these functional murmurs. Of the predisposing causes, the most frequent, according to my observation, are spinal irritation, irritable heart, paralysis, chorea, dyspepsia, epilepsy, a general tendency to spasm, hysteria, the excessive use of tobacco, old age, the last stage of typhoid fever, and other diseases characterized by great depression of the physical organism; and last, but by no means the least frequent cause, the so-called hygræmic condition of the blood. For, whilst I admit that "blood runs thicker than water," yet I am more disposed to attribute the murmur to imperfections of the channel than to the character of the flowing liquid. In respect to the murmurs so often heard in the last stages of typhoid fever, as well as the irregularity of the heart's action, these are more likely to be due to the want of cardiac tension, than softening of the parietes, to which cause some writers have assigned their production. Although these causes are as diversified as possible, yet they are as reconcilable as possible, when we remember that, although the heart is capable of contracting and dilating even when removed from the body, and totally severed from all nervous influence, yet its action is greatly influenced by every kind of influence and emotion*

I know of no additional light that I can throw on the differential diagnosis of functional and organic diseases of the heart. An opinion is only to be formed by experience and a very careful and minute investigation of each particular case, together with a judicious appreciation of the data thereby elicited. In cases that turned out to be purely functional, I have heard the *bruit de souffle*, as well as the *bruit de diable* and *bruit de scie*. I have thought, however, that when the objective symptoms are very palpable, and the physical signs very loudly developed, an opinion might be given in favor of functional disease, and especially so in the absence of hypertrophy or dilatation, or when the area of cardiac dullness is but very slightly increased.

In regard to the prognosis, I have no hesitancy in saying that it is as favorable as possible, except in such cases as those in which paralysis, old age, fatty degeneration of the heart, the last stages of typhoid fever, and other low diseases stand as the remote cause. In truth, since I have been noticing these troubles particularly, every case has fully recovered except a youth who was dying of typhoid fever, and an old lady, whose case is still under consideration. I have styled some of the cases semi-organic, for the reason that, although there is no histological change in the interior structure of the heart, as respects volume or appearance, or heterotopia of tissue, yet in one of the pathological conditions which I have assumed to exist there is diminished tension in the fleshy columns, and doubtless in the cardiac parietes; and this in some cases is capable of superinducing hypertrophy with attenuation of the walls, or eccentric hypertrophy. Although I have found the hypertrophy of dilatation to exist in some cases to an appreciable extent, yet the heart ultimately returned to its normal proportions. Hence, I conclude that although the same causes exist by which true and false hypertrophy are produced in a heart which is organically diseased, viz.: over-distention of the chambers, and an increased amount of work; and in consequence a compensative and conservative hypertrophy; or, on the other hand, a deadly dilatation and attenuation of the walls; yet, whatever change may

* Through the catenation of the cerebro-spinal, par vagum, and ganglionic system of nerves.

have been wrought is capable of being perfectly rectified. This radical difference in the behavior of the two conditions is doubtless due to the kakoplastic metamorphoses that have taken place in the valves and orifices having extended to the cardiac parietes—whether these changes be of rheumatic origin, or softening, or fatty degeneration—and as a legitimate result leading to compensative hypertrophy, or the more unfortunate result, eccentric hypertrophy with attenuation of the walls; both of which conditions are perhaps incurable, and incapable of being rendered normal in their proportions.

As respects the treatment of these murmurs, I have nothing to add, as it consists in merely rectifying the particular fault of system which stands as the predisposing cause of the case that may be under consideration, together with the judicious combination of such remedies as are known to have a specific action upon the heart and nervous centres.

How do the Spermatozoa enter the Uterus?

Dr. J. R. Beck, of Fort Wayne, Indiana, reports a curious observation in the St. Louis *Medical and Surgical Journal*. He remarks:—

The only manner in which this subject can be positively set at rest, and decided for all time to come, is to observe the os and cervix uteri *during the sexual orgasm*. I have made two such observations, and know beyond the peradventure of a doubt that all the descriptions of the modes of entrance of the semen into the uterus heretofore described are totally and wholly, both in the main and in detail, theoretically and practically untrue. What the real force and the real state of affairs is, which compasses the end, remains yet to be described; and we find ourselves, if the truth has been spoken thus far, reduced to the extremity of asking the question again which stands at the head of this paper, "How, then, does the spermatic vesicle enter the uterus?"

I elucidate and answer the question by a description of what I saw, and under what circumstances I saw it. As two observations, yielding identically the same results, were made within twenty-four hours of each other, a description of one will represent both. I take from my case-book the description verbatim of the case, as presented to me at the first consultation.

"August 7th, 1872.—Mrs. H. L., age 32 years; of strongly marked nervous temperament; blonde; married eight years; has one child, son, living, seven years old; has had one abortion; last pregnancy was six years ago; commenced to menstruate at fourteen years of age; present illness has existed six years, dating evenly with abortion. Symptoms which have been apparent during its course were dragging and weight in pelvis; more or less pain in back and loins; slight vesical and rectal irritation; inability to walk without great fatigue; inability to lift weight of any moment; slight leucorrhœa, and a sinking sensation referred to the epigastric region; supposed the cause to be a 'falling of the womb.' Present condition as regards menstruation: menstruates regularly every twenty-eight days, normal as to amount, and suffers no pain of any moment. Leucorrhœa, very slight as to amount, exists all the time; is white, glairy, and unmistakably uterine; pain is intermittent, by no means severe, and is referred to the back, loins, inguinal and sacral regions. Locomotion is impeded to a great extent by the consequent fatigue. As to other symptoms, she is usually constipated, and has a copious eruption of Acne upon the face. Of physical signs, the touch shows the os uteri just inside the vulvæ; the speculum was not used; the probe shows the pelvic-uterine axis to be changed considerably, but no flexion of uterus, and probe enters cavity two and one-half inches. Diagnosis, prolapse of the uterus in the second stage. Treatment, mechanical support to the uterus by means of McIntosh's stem pessary, and, internally, ferruginous tonics, Iodide of Potassium, and Liq. Potass. Arsenitis." Thus much for the history of the case, as compiled from an office examination.

Calling at the residence of the patient next day, for the purpose of adjusting the uterine supporter, I made an examination by the touch, and upon introducing my finger between the pubic arch and the anterior lip of the prolapsed cervix, I was requested by her to be very careful in manipulating those parts, as she was very prone, by reason of her passionate nature, to have the sexual orgasm produced by very slight contact of the finger. Indeed, she stated that this had more than once occurred to her when making digital investigation of herself. Here, then, was an opportunity never before afforded any one, to my knowledge, and one not to be lost upon any consideration. Carefully separating the vulvæ with my left hand, so that the os uteri was brought clearly into view in a strong light, I swept the right forefinger across the cervix twice or three times, when almost immediately the orgasm occurred, and the following is what was presented to my view:—

The os and cervix uteri had been firm, hard, and generally in a normal condition, with the os closed so as not to admit the uterine probe without difficulty; but immediately the os opened to the extent of fully an inch, made five or six successive gasps, drawing the external os into the cervix each time powerfully, and at the same time becoming quite soft to the touch. All these phenomena occurred within the space of twelve seconds' time certainly, and in an instant all was as before; the os had closed, the cervix hardened, and the relation of the parts had become as before the orgasm.

Now I carefully questioned my patient as to the nature of the sensations experienced by her at the period of excitement, and she is very positive that they were the same in

quality as they ever were during coition, even before the occurrence of the prolapse; but admits that they were not exactly the same in *quantity*, believing that during coition the orgasm had *lasted longer*, although not at all or in any respect different as to sensation. I had almost forgotten to make mention of the intense congestion of the parts during the "crisis," and introduce the statement here.

When in connection with the statement of the patient, who is a very intelligent and appreciative lady, I add my own observation to the effect that there was no inflammation of any kind present, either in the os or cervix uteri, the vagina, bladder, or rectum, and that the parts were in an entirely normal condition except as to position, I think we had the phenomena before us which are always present during coition; and the passage of the spermatic fluid into the uterus was explained fully, satisfactorily, and beyond the shadow of a doubt.

Cases of Cerebro-Spinal Meningitis.

The annexed description is by Dr. H. C. FAIRBROTHER, in the St. Louis *Medical and Surgical Journal*:—

In four cases under my care the invasion of the disease was as follows: The child, in apparently good health, goes to bed at the usual hour, but wakes up soon after midnight complaining of pain in the head and asks for water, which when taken into the stomach is immediately ejected, together with other liquid matter of a grass green color. Beyond these two symptons, cephalalgia and gastric irritation, there is nothing remarkable. In the remaining five cases the disorder was marked chiefly by the same symptoms, though coming on in a less abrupt manner. During the progress of the disease a great variety of symptoms present themselves. The most constant among these, and those which seem particularly to identify this affection with the ordinary descriptions of that disorder sometimes called cerebro-spinal meningitis, are the following: severe and continued pain in the head, extending down the spine; nausea and vomiting; rigid tension of the posterior cervical muscles; disturbance of the pupil, either by contraction or dilatation, in one eye or in both; slow pulse; exalted sensibility; in a few cases the petechial eruption; occasional roseolar blush; low moanings or muttering delirium; involuntary twitching of the muscles; dark feces and turbid urine. From several analyses of the urine no uniform alteration in its consistent elements was found to exist. Professor Clemens examined two specimens, but observed no morbid change worthy of record. Now, while one or more of these symptoms has been present at certain times, in every case, they have in no instance appeared together in any considerable number in a distinct and unmixed form, but have generally been more or less blended with other symptoms which seemed altogether independent of the primary affection. And these collateral symptoms have often stood in the way of a clear diagnosis, and caused no small amount of disagreement on that subject. But these very complications have certainly been of such a nature as to impart a rare interest to a proper study of the disease.

For, when carefully observed and recorded, these symptoms have been found, in nearly every case, to so group themselves together, as to indicate beyond a doubt the existence of a secondary disorder. And so prominent often are these secondary symptoms, as to completely mask for a time the primary disease. Hence the frequent difference of opinion with regard to diagnosis. The most common supervening disorder in these cases has been pneumonia, that disease that so often takes advantage of a reduced state of the system for its invasion. It is a form of pneumonic inflammation, too, that is very likely to elude detection, coming on as it does without the usual initiatory symptoms, without cough, without pain, without sputa of any kind. But one will observe a gradual rising of the temperature to the extent of three or four degrees; a quickening of the pulse from its usual low rate to something above the normal standard. The respiration is also quickened, and the deviation from the natural pulse-respiration-ratio that generally exists throughout the disease is increased in some cases to an extent altogether wonderful; so that at times the breathing has been observed actually to keep pace with the pulse. This alteration in the function of respiration readily directs the attention to the chest, where, upon percussion, dullness is found extending over a large portion of one lung, generally the right. By applying the ear to this side of the chest, a more or less complete absence of the respiratory murmur is observed, together with slight subcrepitant rale. It is that hypostatic form of pneumonia extending to the bronchial tubes, which is liable to occur in any of the low-graded fevers. This has proven to be a serious complication of the original malady, the patients nearly all dying soon after the above condition was discovered.

Clinical Significance of Sputa.

Dr. A. J. STEELE, of St. Louis, writes to the *Medical and Surgical Journal*, of that city:—

We have not been able to diagnose pulmonary tuberculosis by means of the tubercle cell found in sputa; and while willing to believe that there is a tubercle cell, *sui generis*, which if found in expectorated matter would afford sufficient evidence of the presence of tubercle in the lung, still, practically this is not known to be possible; for there are so many other elements going to make up the mass of the sputa, namely, epithelial, pus and mucous cells, granular matter, broken down and degenerated tissue, that our cell tubercle, if actually present, is so obscured and concealed as not to be recognized; again, if present, it has so undergone

disintegration as to have lost its characteristics, and thus cannot be made available.

The microscope detects in expectorated matter but a single substance that may be considered pathognomonic, namely, elastic tissue. Its presence signifies lung destruction, brought about by inflammation and ulceration, the latter process not confining itself superficially to the mucous surface, but having extended deeper into the parenchyma itself.

The basement framework of those organs so beautifully adapted to the aeration of the blood, reminding one, with their open spaces and interstices, of sponge, is composed of elastic tissue, which, being of comparatively low vitality, *i. e.*, less vascular than most other tissues, is but slowly susceptible to the destructive process; and thus from ulcerative action fragments of it will be detached and thrown off, still retaining, however, their histological arrangement, being thereby readily recognized under the glass. All sputa does not contain it, but when found it points unerrringly to but one source, and thus its clinical importance.

While the appearance of these elastic fibrillæ is peculiar, yet the novice might confound them with the fibre of linen, silk or cotton. Still each have their characteristics, and a little practical observation will enable one to distinguish each from the other. So also the curved streaks of mucus so often present have been mistaken for elastic fibres. A drop of acetic acid at once decides the difference. Elastic fibres are curved, divide dichotomously, are of equal width, sharply contoured, and remain unaffected by acetic acid; once seen are ever after recognized; best studied from section of healthy lung.

If from the sputa is taken a small quantity of the paler portion of the lumps, and if the grayish masses especially are examined on the slide, the elastic tissue will ordinarily be found. Specimens from different portions of the sputa should be subjected to the glass; a delicate hook to catch up, and scissors curbed on the flat to nip off the matter examined, are convenient. A drop of acetic acid, which dissolves for the most part the substances present, brings out the elastic fibres more decidedly. When much in doubt, it is well to boil the suspected expectoration in *liquor sodæ*. On cooling, the elastic tissue falls to the bottom of the settling glass, and can readily be removed with the pipette. A power of 300 is quite sufficient to exhibit the fibres.

Such a simple matter is this examination, that I am in the habit of subjecting the expectorated matter of most patients afflicted with lung trouble to it.

The special practical importance of this sign is its early recognition of the destructive changes taking place, before other signs indicate it; before even it is suspected, the microscope tells the certain story of disintegration of air vesicle walls. If diagnosis is much in the practice of medicine, surely an early knowledge of the facts is all the more important. "Had I seen the case earlier, or had I only known in time," so often remarks the medical man, "the issue would have been different." While undue prominence should not be given to the microscope, still it should hold its legitimate place in the means employed to diagnose disease. Too much neglected in the past, the day comes when it will be found a working tool in the hands of every physician.

Lung destruction associated with tuberculosis is much less amenable to treatment than when it is simply an inflammatory affection. The concomitant symptoms in the former case, the hereditary and personal peculiarities, with the history, enables it to be readily distinguished, and makes the prognosis guarded; while in the latter case a good result would be expected even though a cavity in the lung should have been found. Just here, and in conclusion, we cannot avoid the suggestion that old cicatrices found in post mortem examination of the lungs, and proclaimed to be evidence of pulmonary consumption cured or arrested,* have been proof merely of nature's repair of excavations produced by a simply ulcerative process entirely unconnected with the tubercular diathesis. These become the cases of so-called "spurious consumption."

Crises; or, Critical Days in Disease.

Dr. VAUGHN says, in the *Transactions of the Mississippi State Medical Association*:—

In the aphorisms of Hippocratus are taught critical days, and the days set forth by that accurate observer of the early day of medicine are universally accepted by the profession now, and we are justly alarmed when we see a crisis on another day than those fixed by this ancient teacher, because it denotes exhaustion, obstinacy, or relapse of disease.

These aphorisms were no doubt the result of a large amount of observation of fever patients, which having been left to nature, therefore afford a clearer basis of observation, and the periods stand to-day, as the 3d, 5th, 7th, 13th, 21st, 27th, etc., days.

Why is it that these days have more importance in the course of diseases than others? Is there any connection between these odd numbers and the diseased state of the body? The fact is acknowledged, is the question solved? I shall try them by nature's own laws, and see if they present no practical truths to help us in our inquiry.

According to physiological experiments it appears that a living organism, where it is subjected to a starving process, does not lose its bodily substance evenly, but rather periodically, so that its greatest losses fall on the 5th, 8th, and 13th days; then the operations in a living organism differ materially from mere mechanical or chemical operations. If you, for example, expose a vessel of water to an equally dry atmosphere, it will lose its contents by evaporation evenly, just so much per hour. The living organ-

* Watson's Practice, ed. 1858, p. 630.

ism does not. It regulates its losses or expenditures by its own laws, which allow its receipts and expenditures to oscillate between a certain boundary, and make its operations go on in regular periods. These periodical fluctuations are, therefore, normal life, part and portion of all its evolutions in health and disease, and are not peculiar to states of disease. When, therefore, in diseases, on the 3d, 5th, 7th, 13th, 21st, and other such days, a greater amount of losses sets in, in the form of excretions, as sweat, urine, diarrhœa, etc., which is called the crisis, it is nothing more nor less than the same periodic oscillation which is going on continually in the living organism, and which becomes more conspicuous in disease, because it is frequently followed by a decided improvement or death.

It necessarily must become more conspicuous, because this periodical loss is added to the extra consumption, which is a condition of the acute disease.

If the physical state of the patient be such as to endure both, he, of course, must feel better next day, when the periodical acme ceases; and he dies if his physical power cannot endure the united action of both.

Thus the critical days of the disease are nothing more nor less than the normal, periodical fluctuations of the living organism, to which they correspond; and the *crisis* in that critical day, with its normally increased excretions, which falls, together with the height of the disease.

In corroboration of this view, I will remark that the so-called *crisis* does not appear when, during the course of the disease, the organism is weakened by *improper* medication, because then the natural periodical fluctuation is disturbed and destroyed; and it does not appear when, by the application of the proper remedy, health is restored, because the periodical fluctuation *alone* is not conspicuous enough to be observed. It is, however, never wanting when the disease runs an undisturbed course; and, in so far, it is an important means of distinguishing a successful or unsuccessful treatment.

To observe with care these critical days, I deem of great importance in chronic, as well as acute diseases, and I readily deduce from such observation the following conclusions:

1st. A well treated disease is cured without a crisis; and we may mark the treatment, confident in the future of like results, in the same malady.

2d. When the patient recovers with well marked days of crisis, we may be sure that we missed the case, and the patient recovered without benefit from our remedies.

3d. When no crisis appears, and the patient gets worse and worse, in spite of our remedies, then we may feel assured we missed the mark, and may have done actual harm by our medication.

Lastly, it admonishes us to be patient in our medication of chronic diseases; never hoping to see a very marked change from medication before the eighth day, and if decidedly favorable then, not to change the remedy before the thirty-fifth day of medication.

I have, gentlemen, collected together and presented you with these observations of experience and research, well knowing that their crudities and errors will fall by the wayside under your critical discussion; while I feel well satisfied that the truths of my paper will be seed sown in good ground; or rather, that I may be merely cultivating the plant springing from seed long since sown, but with some of us it has been choked by the tares of disease.

Chronic Constipation.

Dr. TAYLOR says, in the *Transactions of the Mississippi State Medical Association*:—

The causes, then, of habitual or chronic constipation consist mainly in all those agencies which lead to loss of tone and contractility in the muscles concerned in the act of defecation, and most prominent is the partial paralysis of the muscular tunic of the colon, brought on by over-distention from large accumulation of excrement. This accumulation may arise from an unnaturally large amount of excrement, but it is generally the result of neglect to obey the calls of nature. The desire to defecate is resisted from notions of modesty, or because it is inconvenient just at the time to attend to it; or the mind being preoccupied the call is unheeded. Thus the act is postponed voluntarily or involuntarily, until the sensibility of the rectum no longer gives notice of the presence of fæces. Hence accumulation goes on, the rectum and other portions of the large intestine become distended, and loss of contractile power is the result. Weakness of the abdominal muscles from obesity or pregnancy, and weakness of the general muscular system from anæmia, may induce the disease. It is generally believed that deficiency of bile and intestinal secretion contribute to the establishment of the disease. Sedentary habits are said also to bring it on. But it does not appear clear that the presence of bile in the fæces is necessary or essential for a free action of the bowels, for we often see them acting very freely in cases of jaundice; and it is very probable that mental occupation, and other circumstances which cause the act of defecation to be deferred by persons of sedentary habits, are more efficient in bringing on the disease than the mere want of exercise. A purely nutritious diet, with but little excrementitious residue, may induce torpor of the bowels. Very active assimilation, copious perspiration, and diuresis, are thought to cause it by rendering the fæces unnaturally dry.

In the treatment it is highly important that the patient should co-operate with the physician; and in confirmed cases much patience and perseverance will be required. The sensibility of the rectum must be preserved or restored; and paralysis of the colon

must be prevented or remedied. These are the chief points to be observed in practice. And whilst a judicious selection of drugs will be required in most cases, it must be borne in mind that medicines are of secondary importance. Indeed, it is one of the greatest difficulties which the physician has to encounter to restrain the patient in the use of cathartics. Nothing is more natural than for a person to try to remedy in the easiest and quickest manner possible a difficulty so apparently easy to manage as constipation. Although the immediate symptoms are generally relieved by purgatives, in almost every instance the necessity recurs for repeating the dose again and again; generally in increased quantity or strength. Thus, what is intended as a remedy becomes a source of disease. But the immediate relief experienced by the use of the various pills, bitters, and mixtures, kept at every drug store, grocery and grogshop in the country, and the low price at which they can be bought, recommended as they are by innumerable certificates, gotten up with great ingenuity, are temptations which the people are not prepared to resist. Consequently, the physician must content himself to combat the evil as best he can, until the people shall have been educated to a higher appreciation of the medical profession.

After what has been said, I do not deem it necessary to occupy much time in speaking of the special treatment of constipation. The diet should consist as much as possible of such articles as are known to have a laxative effect; and the experience of the patient must be consulted in making the selection, as idiosyncrasy has much to do with the diet as well as the medicines we use. The food should be easily digestible, and taken at regular, but not too long intervals. Mild animal food, as mutton, chicken, game, etc., and vegetables, fruits, molasses, buttermilk, etc., will be found suitable for most persons. Tea and coffee are more questionable, but as promoters of digestion their use is probably advantageous in many cases. Next to the diet in importance is the establishment of a rule to solicit an evacuation daily at some given hour, and not to perform the act of defecation too hurriedly. This habit persevered in will frequently result in sufficiency in the evacuations, without the aid of medicines, even after the disease has been established. And if practiced, in connection with a proper selection of the diet, before the establishment of the disease, it will generally prevent it. Prevention is not less sure than simple.

In most cases some medicines will be required, but they should be judiciously selected, and administered with caution. Selections may be made according to the peculiarities of the case, and the fancy of the physician. Aloes, on account of its specific action on the large intestine, is most usually selected. It may be given in various combinations to suit the case, *e. g.*, with iron when anæmia exists, with mercury if the biliary secretion be deficient, or with the bitter tonics where the digestive organs are torpid. Aloes, nux vomica, and iron, is a valuable combination in a large class of cases. According to my observation the use of aloes is not contra-indicated by the existence of hemorrhoids; on the contrary, I think it is decidedly beneficial in the external variety of that affection. Most writers on materia medica, through all time, proscribe aloes where hemorrhoids exist, and charge it with producing the disease when habitually used. Yet we have eminent practical authorities opposed to this doctrine. Doubtless an injudicious use of the remedy may have this effect, but we must distinguish between the proper use and the abuse of all remedies. It is the physician's duty to be able to discriminate in the selection of his remedies. It is this which distinguishes him from the quack. Piles is much oftener attributable to the disease for which aloes is used than to the aloes. *Post hoc ergo propter hoc* is a fallacy into which physicians often suffer themselves to fall, and we too often blindly follow authority, without submitting it to the *experimentum crucis*. Oppolzer, of Vienna, who had a very wide reputation in the treatment of hemorrhoids, used aloes in both the internal and external forms of the disease, and he used it whether constipation existed or not. Fordyce Barker, of New York, also recommends it in the treatment of hemorrhoids in pregnant and puerperal women. Some practitioners are very partial to the solaneæ, particularly to the belladonna, variously combined with other remedies. In some cases they may act well; all are familiar with the occasional benefits of a cigar. But it is probable their beneficial action is limited to those cases of erethism, or spastic condition of the muscular coat of the bowels. They are contra-indicated where atony exists. In the latter nux vomica is an invaluable remedy. Electricity and friction over the abdomen are useful in restoring tone in some obstinate cases of partial paralysis. Enemata will be occasionally required to dissolve or soften hardened masses of fæcal matter, or to dislodge scybala. They may be conveniently administered by means of any of the improved syringes now in use, and may consist of simple water, or soap and water, tepid or cool. Some practitioners think highly of small injections daily of cold water, and as a local tonic they will prove useful in some cases.

Points in Medico-Legal Science.

Dr. T. M. Stevens, of Indianapolis, says, in the "Transactions of the Indiana State Medical Association":—

Who are experts? We know this question has been answered in various ways, in former years, and sometimes now it has been held that any physician may, that even a layman can, take the title of and act as an expert; others stoutly maintain that none but those who have turned their attention

exclusively to the subject at issue should be called or admitted to testify. For instance, that, in cases of mental disorders, none but those who have gained experience by coming in contact with large numbers of insane should be deemed worthy of having any sound opinion upon these subjects. This practice excludes all but *attaches* of hospitals for the insane, etc.; or that only he who exclusively, and as a specialist, has turned his attention to surgery should judge as to the correctness, or otherwise, of points so connected. This view, considered alone, is no doubt nearer the truth than the former opinion; but we think the blending of the two is the correct position. An expert is one who has gained a thorough knowledge of a subject, at least who is master of all that is known upon that subject. Such is the definition of every authority. This knowledge may be gained in various ways; indeed, there are many who are better experts after seeing but few cases of insanity, or performing a few surgical operations, than a large majority who have spent years in such relationship. The quick eye and ready perception must be theirs; having these as a foundation, they can be cultivated; but he to whom nature has denied them can never learn—a multitude of facts only confuse him. Our advice to every one who may be asked in court the question, "Are you an expert?" would be to consider if he has mature views in reference to the subject in hand; if so, let him boldly maintain himself, but never once waver simply because he has not cast medicine to the dogs and devoted himself wholly to surgery.

Seeing, now, who ought to be considered experts, we have to say, with reference to the manner of summoning such testimony, that we disapprove of it *in toto*. At a casual view it may look very fair to have both sides of a question examined. That the prosecutor or the prisoner, the plaintiff or defendant, shall be justly dealt with, is certainly right; but to permit either side to bring forward experts to testify in their especial interest is the worst way in the world to gain the ends of justice and truth; for we must remember that *common* and *expert* testimony is very distinct, the one referring to incidents actually transpiring, the other to *opinions* offered upon the evidence or hypothetical case. This latter can be of most varied descriptions, and, indeed, in most cases it is a necessity that such opinions will vary upon some point or points. "Doctors differ," 'tis said, and it is true; and this is one grand argument against pitting opposing testimony, one against the other. We are mortal; none so perfect but they may be influenced, unconsciously to themselves, in the interest of one or other of the parties; and then the clash of arms, the fight for victory, the desire to maintain one's self, the sticking to the "sixteen hands high," though it be proven to be false; being snatched up, perhaps without a moment's notice, to be badgered by the attorneys; expected to deliver matured views upon subjects that require thought and study—all these means, and more, are against the present rule.

But what is the remedy? This is simple enough. It is to have a corps of experts appointed, either through the machinery of legislation or by the courts, say for each district; then you have a body of men, well selected, who can come nearer filling the requirements than any other. First, they will be posted upon all points likely to come up; will have notice, and time to investigate; and, above all, will not be liable to be biased, even unconsciously, in favor of either party, but will have truth alone in view. They might be bribed, 'tis true, or corrupted in some way; but so may judge or jury.

This corps of experts should not only be listened to upon points on which their opinions are sought, but they should be considered the authority. We know the jury are the judges of the facts and law in the case; but we think this ought and will be decided, that it refers to *facts elicited by common testimony*, not touching expert opinions at all. Indeed, what is the use in calling a body of men to give scientific opinions, when the jury is so well able to judge of their merits? It is a farce. Either let the common testimony and the law be placed before them alone, or, if experts are called, let it be acknowledged by an acquiescence in their opinions.

HYPOTHETICAL CASES.

Another point, closely connected with this, is the privilege of putting an hypothetical case and receiving opinions upon it. This, of course, is done so that the prerogative of the jury as judges of facts and law shall remain undisturbed; but, indeed, it only in appearance answers the purpose, for what is the difference in basing such opinions upon evidence heard in court, or from considering a supposed case embracing such evidence? We have no doubt, however, that for the sake of appearance this rule will continue until some provision is made, similar at least to the one we have advocated, to wit, *the establishment of a corps of experts*. When this is done, then the need of this very thin fraud will cease, and a straightforward course be taken, for a hypothetical case is not so fair as it seems to be. A far sounder judgment can be formed if we have a chance to investigate as we see fit, and then state our opinions untrammeled with technicalities.

Goitre in Georgia.

Dr. E. W. Lane, of Scarboro, Georgia, writes to the Georgia *Medical Companion*: There is a neighborhood on the head waters of Lott's Creek, containing about fifty families, and spread over a territory of about five by seven miles, the female portion of which seems to be predisposed to this disease. I have been acquainted with the place for thirty years, and have practiced there for fifteen years. There is rarely a female

that has arrived at puberty that is not afflicted with it. It has been so with almost all the women raised there. There never was a male known to have it in that settlement.

The disease yields readily to the iodine treatment. It is seldom that a physician is consulted in regard to it (so well do they understand the treatment). Any young woman moving there takes it; and those who are raised there and afterwards move out, get well without any treatment whatever. The disease is seldom seen in any other locality that comes under my knowledge. There are several creeks that have their head branches in that neighborhood. There are also many spring branches. The soil is sandy: growth principally pine, interspersed with broad-leaf blackjack. Growth on branches, black gum, pairm elder, white bay, titic, poplar, and short-leaf pine. The drinking-water is obtained from wells, the average depth of which is about twenty feet. The habits and diet of the people are the same as in other places. Malarial fever seldom in that locality. Typhoid fever prevails there occasionally.

The locality is noted for its extreme healthfulness in other respects.

Intra-Uterine Hydrocephalus.

Dr. J. M. Taylor, of Corinth, reported the following case to the *Mississippi State Medical Society*:—

Mrs. R——, mother of several children, general health good, was taken in labor at full term on the 24th December, 1865, attended by a midwife. In due time the body and limbs of a male child of medium size were delivered. But as the head remained an unusually long time, the parties became uneasy and I was called in. Arrived about three hours after the body was extruded. Head of child seemed perfectly fixed, face looking to the sacrum, shoulders resting against the vulva, and the neck occupying the strait of the pelvis. No pain whatever; ergot failed to excite any; could not pass the finger in any direction between head of fœtus and pelvis of mother. Firm traction of body of fœtus had no effect. Could not determine the cause of obstruction. Fault was evidently with the fœtus; could it be a monstrosity? Seeing that it could not be delivered *per vias naturales* unassisted, I sent home for instruments. Messenger had to go three miles, in the night, consuming about two hours, making some five or six hours that matters remained *in statu quo*. The woman complained of nothing in the meantime, except a little impatience at being confined to one position so long. When instruments arrived, I determined, as the child was dead, it should be delivered with the least suffering and danger to the mother, and that embryulcia was the only remedy to accomplish the same *tuto cito et certe*. Accordingly the patient was placed on her back, with the hips resting on the edge of the bed, legs supported by assistants, the child depending and pressing upon the perinæum. I passed Holmes' Perforator along the nucha of the child, carefully protecting the genital and urinary organs of the mother with two fingers of the left hand until I reached the occiput. I then forced the instrument into the head, and expanded the blades; closing them again, I withdrew the point, made a half turn, re-introduced the instrument at the same opening and expanded the blades again, making a very neat crucial incision just posterior to the foramen magnum. On withdrawing the instrument there was a gush of liquid, which flowed into the *pote de chambre*, under cover, so freely, that the question flashed through my mind, "Is it possible that I have wounded the bladder?" On pushing aside the cover, I was gratified to perceive that the fluid was neither urine nor blood. After the vessel was more than half filled with serum the child's head was released without any force or effort. Thus the cause of detention proved to be intra-uterine hydrocephalus, which, if it could have been detected at the outset, would have required only a simple puncture with the trocar. But in such cases the anxiety and sense of responsibility are none the less, since the real cause of difficulty cannot be determined beforehand. The patient recovered promptly.

Recovery from Tetanus.

Dr. A. E. Duncan reports the following case in the Cincinnati *Medical News*:—

March 8th, 1872, was called to Josie D., aged nine years, a healthy child of rather a nervous diathesis. Patient had a slight tetanic spasm at 7 A. M., with premonitory symptoms. Twenty-six hours prior to the first spasm the patient had received a punctured wound in the sole of the foot, from a threaded needle, the needle passing over half through the foot, just behind the articulation of the metatarsal and first phalanx of the little toe of the right foot. There was a well marked red line, some four inches in length, on the top of the foot, marking the course of the inflamed nervous branch. I made a free incision through the punctured wound; directed an emollient dressing, for the entire foot, of bread and milk and water, to be frequently changed; and prescribed chloral hydrate every hour. Left the patient, with instruction to inform me at once if another spasm occurred.

At 8½ o'clock another spasm returned, with increased severity and duration; the spasm returned about every hour and a half. Used chloroform, by inhalation, freely; continued chloral hydrate between the spasms. From 3½ P. M. to 7½ P. M. the increasing and continued spasm was only held in check by the use of chloroform. From 8 P. M. to 7 A. M., March 9th, the positive tetanic symptoms were only slight. During the night continued chloral hydrate p. r. n. and sul. quinine.

During March 9th the patient was in

every way about the same as the day preceding; the severity of the paroxysms were, perhaps, a little more readily controlled by the use of chloroform. Treatment continued, with the addition of bromide of potash combined with the chloral, and the use of resin cerate applied along the course of the inflamed nerve; used enema to produce defecation.

March 10th, patient quite prostrate; has taken no nourishment for more than two days; directed oyster soup. General improvement in the condition of the patient. At 9 A. M. tetanic spasm returned, but with less severity. Kept the patient well under the influence of the chloral; resorted to the use of chloroform at the slightest approach of the spasm.

March 11th, patient quite comfortable, and entirely free from spasm or rigidity of the muscles.

During the entire course of the disease the muscles of the right side were more affected than those of the left side, except the muscles of the face, which were about equally affected on both sides.

March 12th. From this date the little patient made rapid improvement, and was soon quite well.

Reviews and Book Notices.

NOTES ON BOOKS.

Recent Works on Military Surgery.

The experience of the last few years, especially in Europe, has been so extended in military surgery, and the sanitary studies of camps and barracks, that we need not be surprised at the large number of works recently issued on these branches. We have collected the titles of some of the more recent and important of these. Those in German are the most numerous.

Fischer, G. Dorf Floing und Schloss Versailles. Kriegschirurgische Erfahrungen. Mit einer Tafel. [Aus "Zeitschrift für Chirurgie."] *Leipzig*, 8°. 114 pp.

Kirchner, C. Aerztlicher Bericht über das königl. preussische Feld-Lazareth im Palast zu Versailles während der Belagerung von Paris vom 19. September 1870 bis 5. März 1871 von seinem Chefartz. *Erlangen*, 1872. 103 pp.

Beck, Bir. Chirurgie der Schussverletzungen. Militärärztliche Erfahrungen auf dem Kriegsschauplatze des Werder'schen Corps gesammelt. I. Hälfte. Einleitung und allgemeiner Theil. 370 pp.

Friedleben, Alx. Aufgaben und Ziele für den Bund der deutschen Vereine zur Pflege im Felde verwundeter und erkrankter Krieger. 158 pp.

Chipault, Ant. Fractures par armes à feu, expectation, résection, souspériostée, évidement, amputation. Avec 37 planches en chromolithographie desinées d'après nature et lithographiées par *G. de Laperriere*. 316 pp.

Girard, C. Contribution à l'histoire médico-chirurgicale du siége de Paris. 103 pp.

Borgialli, D. Studi clinici sulle lesioni traumatiche del capo. 76 pp.

Moinet, Fr. W. A Treatise on the Causes of Heart Disease, with a Chapter on the Reason of its Prevalence in the Army. 112 pp.

Large additions to our knowledge of gunshot wounds may be looked for in consequence of the admirable organization of the medical staffs of most European armies.

——Since Prof. von Niemeyer's death several of his minor studies have been collected and are now being published by Enke, of Erlangen, under the modest title "*Medicinische Abhandlungen.*" The first part contains an essay entitled "*Atmiatry, a Practical Study*," this being the name he gives to treatment of disease by inhalations of vapors and gases (*Athmungs und Luftheilkunde*).

——Dr. Darwin's new and important work on the Facial Expression in Animals is now completed and ready for publication.

——The new photographic processes of reproduction are especially valuable in natural history and anatomical publications. Prof. Agassiz has made use of both the Albert and Woodbury processes in the illustration of his forthcoming "Revision of the Echini."

——The Louisville *Courier-Journal* thinks that "much of the profanity of the age is the result of sending people magazines with uncut leaves. There is now a general outcry against uncut publications, and a reform sooner or later is not improbable."

——The sixth volume of the *Gynæcological Journal*, January to July, 1872, published and for sale by James Campbell, Boston, is handsomely bound and printed. This periodical is growing in favor, and were it conducted with a little less attention to the mere personal likes and dislikes of those who have charge of it, would merit approbation in all quarters. But at what time in

the world's history have men learned that the pursuit of science should be divorced from the squabbles of individuals? Terms, $5 a year; single numbers, 50 cents. Bound half-yearly volumes, $2.50 each.

——Among the numerous works on general science lately published, which have an interest to the physician, we may mention the following:—

M. J. PLATEAU communicated in May last, to the science class of the Academie Royale de Belgique, a remarkable paper, entitled "Mesure des sensations physiques, loi qui lie l'intensité de ces sensations à l'intensité de la cause excitanté," which has been printed in *L'Institut* for the 24th of July. It is a very careful examination of the facts published by FECHNER in two publications, "Uber ein wichtiges Psychophysisches Gesetz," which appeared in "Memoires de la Societé Saxonne des Sciences," Vol. IV, and "Elemente der Psychophysik," published at Leipsig.

——Dr. ELLIOTT COUES, one of the most distinguished of our younger naturalists, has written a work on ornithology, giving a complete account of the present state and results of that science. It gives a concise account of every species of living and fossil bird at present known in North America, and will be well illustrated with steel plates and wood-cuts. A notable feature of it, especially useful to young students of ornithology, will be the artificial table for determining the place of any unknown specimen, arranged by Dr. COUES after the method of the manuals of blow-pipe analysis. This "Key to the North American Birds" will be published by the Naturalist Agency, Salem, Mass.

——LEE & SHEPARD will have ready before long an elegant edition of "A General System of Descriptive and Analytical Botany," in two parts. Part I contains Organography, Anatomy, and Physiology of Plants; Part II treats of Iconography, or the description and history of Natural Families. The work has been translated from the French of E. LE MAOUT, M. D., D. J. DECAISNE, by Mrs. HOOKER, wife, we presume, of Dr. Y. D. HOOKER, Director of the Royal Botanic Gardens at Kew, and will have 5000 wood-cuts!

——The APPLETONS, of New York, republish Dr. BASTIAN on "The Beginnings of Life," an elaborate contribution cognate to Darwinism. "The Evolution of Life," by Dr. HENRY C. CHAPMAN (Lippincott), is another on this subject.

——Sir WILLIAM THOMSON'S "Papers on Electrostatics and Magnetism," and valuable elementary works on anatomy, by the noted MIVART, are announced by Macmillan. Ornithology is to be well remembered in the superb work, Prof. BAIRD'S "Birds of North America," published by Little, Brown & Co.

BOOK NOTICES.

Practical Lessons on the Nature and Treatment of the Affections produced by the Contagious Diseases; with an Account of the Primary Syphilitic Poison, and of its Communicability, based on extensive direct and comparative Observation of the Diseases in both Sexes. With an Appendix on the recent Report of the Royal Commission on the Contagious Diseases Act, and its Application to the Voluntary Hospital System. By JOHN MORGAN, A. M., M. D., etc. With plain and colored Illustrations. Philadelphia: J. B. Lippincott & Co. London: Bailliere, Tindall & Cox, 1872. 1 vol., cloth, 8vo. pp. 336.

The author of this work has been one of the attending surgeons to Westmoreland Lock Hospital, Dublin, for a number of years, and has encountered, of course, numerous cases of venereal disease, many of them highly illustrative. He lacks, however, the faculty of presenting them successfully; and his present work is an ill-digested, imperfect, and often obscure and wandering account of his experience. The typography is exceptionally poor, and the style careless and faulty.

The author discusses the existence of two different poisons, causing chancre and chancroid; quotes examples of the inoculation of healthy persons; scatters here and there his views as to treatment, and has considerable to say about the Contagious Diseases Act, which he regards very favorably.

While we have little to say in praise of this work, we can confidently recommend it as an excellent one to scare the laity into virtue, as its illustrations are of such a character as to give them a forcible idea of the horrible plights in which a man may get who contracts the "bad disease."

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, OCT. 12, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

HIGHER FLIGHTS IN ANATOMY.

Once in our hearing a teacher of anatomy told his class that one science at least—the one he was lecturing upon—might fairly be said to be exhaustible and well nigh exhausted; that every bone, muscle and nerve in the human subject has long been located and named, and even in the lower animals we can look for little that is new in this field. How widely that teacher erred has been strongly impressed upon us by a perusal of three or four essays published within the last half year.

Indeed, anatomy is but just commencing its higher flight into the regions of abstract and pure science. Hitherto, it has been merely a sorting and naming of specimens, as it were, and the eye of genius which was to deduce from these incoherent details laws as wide-reaching as the universe itself, has been wanting. There are such laws, and the expression we have used concerning them is no hyperbolical exaggeration, but is likely to prove a sober deduction of the exactest reasoning, aye, even a mathematical demonstration itself.

If our readers will be willing to quit for a few minutes the path of the practical and utilitarian in medical science, to which as a rule we avowedly restrict ourselves, we will attempt to indicate in the briefest outline the plan of development of anatomical science, the problems it proposes to itself, and the possible goal to which it is tending.

A hundred years ago (1774) the eminent anatomist VICQ D'AZYR perceived that the upper and lower limbs of man and animals bear certain relations to each other, twofold in nature, some of structure (morphology, homology), others of function (analogy, teleology), which, closely considered, lead to results of the highest significance. His essay on the subject, though obscure, gave a start to further studies. Remembering that organisms morphically similar are *homologous*, while those teleologically similar are *analogous*, the reader will understand that the various members of the body are to be compared in these two relations. But in carrying out this comparison two schools have arisen, the one the *syntropists* who maintain that homologous parts look in the same direction; the other the *antitropists*, who insist that such parts look in opposite directions. For example, the former believe that the thumb is the homologue of the great toe; while the latter teach that not the great but the little toe is the true homologue of the thumb. To this latter school belong Prof. JEFFRIES WYMAN, of Boston, and Prof. BURT. G. WILDER, of Cornell University, and it is from the work of the latter that we quote these explanations.

Besides these homologies of members, this repetition of structural or functional plan on the one side and the other, and in the superior and inferior extremities, there is also a repetition between the cephalic and caudal portions of animal organisms, and a vertical homology between the dorsal regions and ventral regions, not only of the single individual, but, in order to complete the true anatomical idea, between two individuals of opposite sex. "Thus there re-

sults," says Dr. WILDER, "a true antitropical homology in all three directions corresponding with the three diameters of a solid."

Allied problems constantly rise to involve still further these intricate relationships, and to render more difficult the solution of the question which lies at the basis of these researches, namely, to define the fundamental plan or type of organic animal life, the law of nature which underlies all structural development, and adapts it to the special uses for which in each case it is designed.

Here an analogy suggests itself, and has been brought forward with due caution, but in a significant relation, by Dr. HENRY HARTSHORNE, before a recent meeting of the American Philosophical Society. It is well known that in vegetable anatomy the leaves and branches of plants follow in their arrangement a spiral law (phyllotaxis) arithmetically calculable, and he suggests that the bilateral symmetry of vertebrates, articulates, and some mollusks, and the whorled forms of radiates and coelenterates may present results of a similar force exercised in a spiral direction in obedience to the same laws. Such a force, indeed, may well be extended even to radiates, for they, at times, as AGASSIZ admits, indicate an apparent bilateral symmetry. Thus we might find at last all organic life developing in forms guided and modeled by the same laws which we are quite certain govern the growth of plants.

And what are these laws? Here we reach the strangest part of this wonderful story. They present the most striking correspondence, we may even boldly say they are identical with the laws which have defined the successive distances of the planets of our solar system from the sun! The brain swims in this enormous leap. But the daring foot of science does not hesitate even at the door of immensity. What law, we again inquire, is this which rules with even hand the scattered worlds in space, and the growth of every most trivial form of organic life upon all and each of these numberless revolving orbs?

This primordial force has been made the special subject of study recently by Prof. PLINY E. CHASE. He has demonstrated that in any explosive action along a given diameter cardinal points of action occur, whose mathematical combinations coincide strangely with the systematic arrangements of vegetable organisms. Hence he traces all such modifications of solar radiation (for to this we must refer all terrestrial organic forms) to ethereal oscillations, the result of explosive action in a perfectly elastic medium; and this is the primordial material force.

But we have now wandered far from the bones and muscles of the subject. Space and time grow vague and indeterminate in such regions of thought. And it is better that we drop our pen, referring those who would look further into this new anatomy to Dr. WILDER'S primer of the science, just published, entitled *Intermembral Homologies.*

LATENT SENSES.

The shallow materialism which would confine all our knowledge to that furnished us by our five senses, meets its refutation in a close study of our physical faculties, not less decidedly than when we analyze our mental powers.

No rational observer can deny the existence of certain peculiar abilities, or, if we may use the expression, latent senses, which take cognizance of facts, and convey a more or less clear impression of them to the intellect, and which are developed far more strongly in some individuals than in others. They point to qualities of matter not recognizable by our weights and scales, and conditions of existence quite asunder from those with which our other senses make us familiar. Misinterpreted, they make up "the night side of nature;" they become a source of superstition or pseudo-science;

and sound men fight rather shy of having anything to do with them, lest they should be classed with the impostors who make capital out of them.

A simple example of what we mean is seen in certain persons of nervous temperament, who can tell the approach of an unseen and unheard individual by a kind of instinct, a sense of presence, not attributable to any sense. Others, again, less numerous, are distinctly and immediately affected by a prevailing tone of mind in an assemblage, or in a companion, though no overt act, or word, or look, betrays that condition. Whether this faculty is ocasionally carried to such lengths as to bring about the state known as *en rapport*, we have never had an opportunity to convince ourselves, beyond the suspicion of possible deception. That there is an "atmosphere of mind," however, many facts prove. Some striking instances of "presentiments" can only thus be explained.

British naval history contains a perfectly well-authenticated instance of a commander of a vessel who altered his course, and stopped at an uninhabited island, prompted to do so by a pervading certainty that he would find shipwrecked and suffering men there. He did so, and, being the reverse of superstitious, explained it on the theory that their intense anxiety affected his mind, though at a distance, through some medium of communication similar to that which deflects certain metals, when freely suspended, toward the pole.

How far the demon of Socrates, and those other inward guides which other men of great genius have recognized, can be explained on similar hypotheses, it were premature to say. Was it an idle superstition that these men cherished? It is noticed that those who risk much and often are most observant and heedful of these silent monitors. Is this because the slaves of chance, knowing their success depends not on careful forethought, are thereby driven to groveling superstition? Or is it not that dealing in matters where reason cannot help them, and remains silent, they are more heedful to the voice of other mentors, disregarded by most minds?

An example of this is well known in Europe, in the person of a wealthy Maltese nobleman, the Commendatore VINCENZO BUGEJA. He is often seen at the famous resorts along the Rhine where public gaming-tables are found. He plays only at rare intervals, and then only for very large stakes; but he declares that he never plays unless inwardly admonished to do so by some inward power or impulse which he cannot resist, and he always leaves off playing the instant he is warned by this same influence. He wins while obeying the impulse, but loses when he disobeys the admonition to stop. He appeared at the German tables in 1865, 1867, and 1869, and on every occasion was a heavy winner; but he distributed the greater portion of his winnings among the poor, and then left abruptly for parts unknown, and would not be heard of again for many months; indeed, after his last appearance in Homberg, in 1869, he was not seen again in Germany until about a month ago. He then made his appearance at the tables at Homberg, but remained a fortnight without staking a franc. Then, suddenly, he played with great boldness, winning twenty thousand dollars the first day, and never less than five thousand dollars on other days, "until he heard from his internal monitor," and then he started for Berlin.

But a much more satisfactory example of what we mean by latent senses is told of himself by Mr. W. HANKS LEVY, F. R. G. S., in a work entitled "Blindness and the Blind," lately published in London. He says:—

"Whether within a house or in the open air, whether walking or standing still, I can tell, although quite blind, when I am opposite an object, and can perceive whether it be tall or short, slender or bulky. I can also

detect whether it be a solitary object or a continuous fence, whether it be a close fence or composed of open rails, and often whether it be a wooden fence, a brick or stone wall, or a quick-set hedge. I cannot usually perceive objects if much lower than my shoulder, but sometimes very low objects can be detected. This may depend on the nature of the objects, or on some abnormal state of the atmosphere. The currents of air can have nothing to do with this power, as the state of the wind does not directly affect it; the sense of hearing has nothing to do with it, as when snow lies thickly on the ground objects are more distinct, although the footfall cannot be heard. I seem to perceive objects through the skin of my face, and to have the impressions immediately transmitted to the brain. The only part of my body possessing this power is my face; this I have ascertained by suitable experiments. Stopping my ears does not interfere with it, but covering my face with a thick veil destroys it altogether. None of the five senses have anything to do with the existence of this power, and the circumstances above named induce me to call this unrecognized sense by the name of 'Facial Perception.'"

He adds the following examples of the accuracy of this sense:—

"When passing along a street I can distinguish shops from private houses, and even point out the doors and windows, etc., and this whether the doors be shut or open. When a window consists of one entire sheet of glass it is more difficult to discover than one composed of a number of small panes. From this it would appear that glass is a bad conductor of sensation, or at any rate of the sensation specially connected with this sense. When objects below the face are perceived, the sensation seems to come in an oblique line from the object to the upper part of the face. While walking with a friend in Forest Lane, Stratford, I said, pointing to a fence which separated the road from a field, 'Those rails are not quite as high as my shoulder.' He looked at them, and said they were higher. We, however, measured, and found them about three inches lower than my shoulder. At the time of making this observation I was about four feet from the rails."

In an analogous manner, positively deaf people are aware of persons walking behind them, or of a loud noise, although of the nature of the noise they have no clear conception. The waves of sound impress them in some other way than through the nerves of audition. The subject is one that offers an extensive and attractive field for study, and will some day yield unexpectedly rich results, we do not doubt.

THE RIGHTS OF MEMBERS OF SOCIETIES.

Last winter we took occasion to show how absurd was the pretence put forward by certain Medical Societies, and by an organ which tried to uphold them, that members of Medical Societies, if wrongfully treated by a majority, have no remedy. We claimed they have a remedy, and that, other and milder means failing to gain them justice, they have a right to use it without being howled at by partisan journalists.

A late decision of Judge STITES, of Louisville, in the case of Cook *vs.* the College of Physicians and Surgeons, expresses tersely the law on this point. COOK petitioned for a writ of mandamus to compel the College to restore him to membership, from which he had been ejected. The writ was denied on the general ground that he had shown no injury received either to person, property, or reputation, and also on the technical ground that under the Kentucky State code only executive and ministerial officers can be compelled by mandamus, and such the officers of the Society were not shown to be.

The learned Judge ruled as follows:

"The exercise of an inherent and incidental power of expulsion is, of itself, not an act the commission of which is forbidden by law. Neither is refusal to recognize such expelled person as a member of the corporation body an omission to do an act the performance of which is enjoined by law. And, as we have seen, it is only in one or the other of the class of cases named that the writ is allowed under the code.

We do not mean to say that the exercise of the power to expel may not be wrongful and illegal, and that such wrongs are not remediable. But we do say that, in our

opinion, when complaint is made of the exercise of a power like this as wrongful, the party complaining must set forth the facts which make it wrongful. A mere allegation of the fact of expulsion accompanied with a charge that it was wrongful will not suffice. The charge of illegality and wrong is only an allegation of a conclusion and that of law."

This is precisely what we insisted on, namely, that while any such Society has the right of expulsion, it must exercise that power with due regard to the rights of the individual, and when it neglects to do this, it lays itself open to an attack under the law, and if the expelled member takes that remedy, no one but the most willfully blinded partisan will blame him.

Notes and Comments.

On Tobacco Amaurosis.

In the last volume of the Royal London Ophthalmic Hospital Reports, Dr. Jonathan Hutchinson gives a series of statistics on the Amaurosis attributed to the use of Tobacco. In his remarks on these cases he says:—

Holding the opinion that there must be some pre-existing peculiarity in the nervous systems of those who become the subjects of tobacco amaurosis, I have been very anxious to discover, if possible, whether it reveals itself by any other signs. The only points in this direction to which I feel at present inclined to attach any importance are the following. Not unfrequently it will be found that these patients have had unusual difficulty in learning to smoke, and have throughout life displayed special susceptibility to its influence, and that also they have often been, beyond the average, liable to suffer from sea-sickness. In the tabular statement some information will in many cases be found given on these points. My attention to the matter of sea-sickness was first given in consequence of the statements of some patients who were sailors, and who specially referred to it.

We have, during the last few years, made the observation that those who suffer are, almost invariably, smokers of *shag*, the most deleterious form of tobacco. As regards the results from disuse of tobacco my impression is strong, that almost invariably when the disuse is real and complete, the state of vision improves. I cannot exaggerate the expression of my conviction as to the duty of urging immediate and complete abstinence in the early stages of this most serious malady. Many of my patients came too late; have continued to smoke until the disease was far advanced. I have never seen a case in the early stage in which the disease went on to blindness if the patient had strength of will to give up the habit. In a large majority of those in whom, according to the patient's account, the habit was wholly abandoned, I had reason to suspect that it was only reduced. My experience on this point fully confirms that of Mr. Mackenzie, that there are those "who would rather smoke than see." It is very few, however, who have the honesty to admit their inability to give up the habit, and hence a very annoying source of fallacy in our inferences as to the effect of treatment.

A State Commission on Insanity.

We observe that Gov. Hoffman has appointed a commission, consisting of the Attorney General of the State, Dr. Anderson, President of the Rochester University, and Dr. Thomas Hun, of Albany, with authority to investigate all charges that may be laid before them against any asylum for the insane, under public or private management, in the State of New York, and to visit and inspect the several asylums, with or without charges being made against them, with a view to discovering abuses wherever they exist, and has requested them to report the result of their inquiries as soon as possible. Under the laws of the State, justices of the peace are empowered to commit persons to lunatic asylums, without any other evidence than the mere certificate of two physicians. It is charged that the law has been abused in a great number of instances, persons having been shut up in these institutions on allegations of insanity which were untrue, for the purpose of accomplishing some ulterior object, such as the prevention of a marriage, or more frequently, the bequest or distribution of property.

Every State should have a competent commission, a part, at least, of whose duties should be to investigate the management of all institutions, public and private, for the treatment of the insane, imbecile and inebriate, and to examine into all cases of

alleged abuses. While all necessary guards should be thrown around the transfer of insane persons to hospitals for treatment, it should not be made so difficult that such persons cannot be so transferred on short notice when necessary, as is often the case.

Case of So-called "Adipocere."

Corpses buried in humid ground sometimes undergo a change into a kind of soap, the alkali being ammonia, and the fat showing an excess of margaric acid. The chemist FOURCROY supposed that this *gras des cadavres* is identical with cholesterine and spermaceti, and united them under the name *adipocere*. This view was disproved by CHEVREUL.

The following instance is given in the *Tribune*, of South Bend, Ind. It appears that about two years ago a lady of that city, who died from over-exertion, was buried there, and that recently the grave was opened for the purpose of transferring the remains to another resting-place. The persons employed found themselves unable to move the coffin on account of its great weight, arising, it was supposed, from the petrifaction of the corpse. On raising the coffin from the grave it was opened, and although petrifaction had not taken place, the corpse was as perfect as the day it was placed in the coffin. After it had been brought to this city, a more careful examination was given it. It was estimated to weigh about two hundred pounds. The whole body was perfectly preserved, even to such parts as the tongue, which could be moved back and forth in the mouth. The expression of the face was retained, and the color of the face was natural, except for its waxy appearance. The shroud, when exposed to the air, fell to dust. It was an instance of that kind of conversion of the flesh of a dead body into what is called "adipocere," which looks very much like spermaceti. Similar cases, though rare, have been known to occur in Philadelphia.

On Proving Medical Services.

It is but rarely that a medical man brings suit to recover his fees, and it then becomes a matter of importance to know whether his oath is sufficient proof to establish the fact of his visits. A case in point is reported in the *Canada Medical Record*, of September. In the city of Montreal, very recently, a medical practitioner sued a person for a bill of small amount. The circumstances which led to the suit being taken out were of a peculiarly aggravating character, or the action would not have been entered upon. The case went by default, and the plaintiff was placed in the witness box to swear to the correctness of the account. He had scarcely done so when the judge said it would be necessary for him to prove the visits before he could give judgment. To this the plaintiff demurred, stating that beyond his individual oath as to the visits having been made, it was impossible to produce other testimony. The judge then said if one visit was proved he would take the oath of the medical man with regard to the rest. To this the plaintiff gave the same reply as before, stating that if able to prove one visit, he would, in all probability, have been able to prove all. Under the circumstances the Judge (Beaudry) refused judgment, and the case was put aside. At the following term, before another judge, judgment was obtained without the slightest trouble.

In all such cases the oath of a practitioner ought to be deemed abundant evidence.

Neuralgia of the Testis.

In the majority of cases, says Dr. LAZARUS, in the *Wiener Med. Presse*, July, 1872, neuralgia of the testis is caused by *abstinence from coition*. Not in real celibates, however, but in those accustomed to indulge their passions, and who for any cause are prevented from doing so for a long time. It is often relieved by an involuntary nocturnal emission, or by a half-successful coitus. (?) Unsatisfied sexual excitement produces it; hence its vulgar name, "horn colic."

As a very efficacious remedy, the Doctor recommends *sulphate of zinc*, both internally and hypodermically, in the usual doses. For the stomach, it may be combined with a little hydrocyanic acid.

A Positive Sign of Death.

In 1870 the Academy of Sciences of Paris offered a prize of twenty thousand francs for some simple and positive sign of death, one which can be applied at any time by non-medical persons, requiring no instruments, and unmistakable in its indications.

Of course, a number have been spoken of. The latest, and perhaps the best, is that sug-

gested by Dr. HUGO MAGNUS, of Breslau, in one of the latest numbers of *Virchow's Archiv*. It is simple, physiological, and conclusive. Everybody knows that when the circulation positively ceases the man is dead. No matter how profound the coma or trance, no matter how deathlike the lethargy, some circulation *must* continue, be it ever so sluggishly. When it stops once, resuscitation is impossible.

All that one has to do, therefore, is *to tie a string firmly around the finger of the supposed corpse*. If there is the least spark of life left, that is, if the blood circulates at all, the whole finger, from the string to the tip, will gradually turn a bluish red, from the engorgement of the veins. Nothing else, no post-mortem infiltration, can be mistaken for this appearance.

We attribute a great deal of importance to this suggestion, and consider it the most practical and satisfactory of any we have seen.

Resorts for Consumptives.

Dr. LOMBARD, in an Italian medical journal of recent date, *La nuova Liguria Medico*, June, 1872, has published an able essay, recommending for consumptives, and those threatened with weak lungs, a residence in cool and elevated localities, *at least* fifteen hundred feet above the level of the sea. Only such places should be chosen, however, as have comfortable accommodations, a generally clear sky, readiness of access, pleasant scenery, and the conveniences requisite for an invalid. Cold bathing, gymnastics, and open air exercise, abundance of milk, butter, nourishing fatty diet, good wine, and cod-liver oil, are the indispensable accessories. With these, the chances of a complete cure are very good, in the early stages.

He adds a list of such places in Europe. In Italy there are Bormio and Uzeglio; in Switzerland, Davos, on the Platz (where there is an excellent sanitarium), about four thousand eight hundred feet high; Samaden, St. Moritz, Pontresina, Maloja, and Tarasp; in France, Mondore, Cauteret, St. Sauveur; in Spain, Pentigosa, in the mountains of Aragon; in Germany, Görbersdorf, fifteen hundred feet high.

To our thinking, these recommendations of Dr. LOMBARD are the soundest we have read for a long while.

Effects of Bad Air Illustrated.

A striking example of the effects of vitiated air is detailed by Dr. R. A. SMITH, of London, in *Nature*. It sets in a clear light the fact that no great diminution of the percentage of oxygen in the air is necessary to make an atmosphere almost deadly to human beings, and the fact that we may be about as ignorant of the noxious quality of the air we are breathing, even while we are taking it into our lungs, as we are susceptible of injury from it. In some of his experiments he used an air-tight chamber, the atmosphere of which he vitiated by burning candles in it. On one occasion a young lady, who was anxious to make the experiment, got into this enclosure just as the candles were put out, and at the end of five minutes, during which she made light of the difficulty, it was necessary to help her out, the partial asphyxiation having taken place in an atmosphere in which the percentage of oxygen was about 19·0.

NEWS AND MISCELLANY.

Thiers vs. Materialism.

It seems that M. THIERS, although burdened with the cares of State, as President of the French Republic, has not entirely abandoned his literary labors. On the contrary, an important philosophical work is about being published from his pen. On this subject we find the following, credited to *Galignani*:—

The Prefect of the Vienne, M. de Lavedan, in a speech at the distribution of prizes of the College of Poitiers, made the following revelations: "A few weeks ago," said he, "in the midst of most important public business, M. THIERS did me the honor to inform me that he was occupied with a special work, independent of his other labors. 'I should be glad,' he exclaimed, in a tone of noble indignation, 'to confound materialism, which is a folly as well as a peril. There is a fine book to be made on this subject, and I have as yet only written the half of it. Certainly I devote myself with my whole heart to the liberation of the territory and the reorganization of the country, but at times I cannot help regretting my peaceable and cherished studies. For twelve years I have been engaged in this work; during all that time I have been demanding from botany, chemistry, and natural history their arguments against the detestable doctrine which leads honest people astray. I am a spiritualist, an impassioned one; and I am anxious, I repeat, to confound materialism in the name of science and good

sense.'" The *Courrier de France* adds another detail. In speaking one day with some friends about his new volume, M. THIERS said: "I must give a pendant to my book upon property. I am preparing it; a work against materialism. There is no great distance between the enemies of God and the foes of those who possess anything."

Strange Superstition.

One would hardly look for such a superstition as the following, in the State of Massachusetts: At the request of his son, who is sick, of consumption, William Rose, of Saunderstown, Mass., lately dug up the dead bodies of two of his children, in order to burn the liver and heart, intending by this ceremonial to cure his sick son, upon whose vitals, in accordance with a popular superstition, the dead were supposed to be preying. It is added, that this is not the first time that graves have been dug up where consumption was prevalent in the family, and the vital parts burned, in order to save the living. A few years ago the same was done in the village of Moorsfield, and also in the town of North Kingstown.

The Cholera in Russia.

From the beginning of the spring, when the epidemic commenced, up to the 1st of September, there were 2793 cases of cholera in St. Petersburg. Of these, 1203 recovered, and 1349 died, 241 remaining under treatment at that date. In the last week in August 5557 cases were reported from different parts of Russia in Europe.

Eye Clinics.

A Greek merchant of Bucharest whose sister had been cured of a cataract by Dr. Kugel, a pupil of Graefe, has established a handsome hospital for diseases of the eye in that city, with an income of 40,000 francs.

Prof. Jacobson, of Konigsberg, has opened a clinic in that city for diseases of the eye.

POSSIBLY Dr. GROSS never said what some one has attributed to him in the following item which we find "going the rounds," but he says so many good things that do not get into print, that we give him the benefit of this.

Dr. Gross, the celebrated surgeon, was once dangerously ill. Soon after his recovery he met one of his lady patients, who remarked to him, "O, Doctor, I rejoice that you are out again! Had we lost you, our good people would have died by the dozen." "Thank you, madam," replied the affable Doctor; "but now I fear they will die by the Gross."

THE late George Jaques, of Worcester, Mass., bequeathed the bulk of his property, nearly $500,000, for the benefit of the City Hospital of Worcester.

The Health of Heidelberg.

This beautiful and favorite resort for American students and families has been afflicted this summer with an epidemic of typhoid fever. About 200 cases are reported, several students among them. The disease is attributed to defective drainage and the high water in the Neckar this summer.

THE French Academy of Sciences has declined to elect Darwin among its members. The reason given is that Darwin is not scientific; "that he has too far sacrificed reason to imagination to deserve a place in the first rank of scientists."

DR. H. M. KNIGHT, of Lakeville, Conn., having been awarded an appropriation of $10,000 from the last Legislature, is prepared to expend it in the enlargement of his school for imbeciles.

MARRIAGES.

EVANS—OLIVER.—October 1, at the residence of the bride's father, H. W. Oliver, Sr., Esq., Hazelwood, Pittsburg, by the Rev. C. Dorsie, Dr. C. Evans and Miss Maggie B. Oliver.

GARRISON—COX.—September 30, at Wenonah, Gloucester county, New Jersey, by Rev. S. M. Hudson, Joseph E. Garrison, M. D., and Miss Anna E. Cox, both of Wenonah.

HUTTON—ROBBINS.—At the house of the bride's parents, on September 24th, by Rev. N. S. Buckingham, Dr. T. J. Hutton, of Shenandoah, Pennsylvania, and Miss H. Lapett Robbins, of Bloomsburg.

KING—FISHER.—October 1. at Devon, Bucks co., Pennsylvania, by Rev. Frederick W. Beasley, D.D., Dr. Charles R. King, of Andalusia, Bucks county, Pennsylvania, and Nancy V., daughter of the late William W. Fisher, of Philadelphia.

LOZIER—DE LA MONTAGNIE.—In Brooklyn, October 1, at the residence of the bride's parents, by Rev. F. Bottome, D. D., Abraham W. Lozier, M.D., of Yonkers, New York, and Jennie De La Montagnie, of Brooklyn.

PRICE—REMINGTON.—At St. John's Episcopal Church, Baltimore county, Maryland, by the Rev. H. Y. Pindle, Dr. Mordecai Price, of Philadelphia, and Fannie F. Remington, of Baltimore county, Maryland.

RICHTER—ROBBINS.—October 2, by the Rev. J. De Wolf Perry, Henry W. Richter, M. D., of Brooklyn, L. I., N. Y., and Lizzie, daughter of Jeremiah Robbins, of Germantown, Pa.

WALWORTH—YEISER.—September 14, at Trinity Church, in Danville, Kentucky, by the Rev. D. S. Goodloe, Ernest Walworth, of Arkansas, and Miss Mary D. Yeiser, daughter of Dr. Daniel Yeiser.

DEATHS.

BAELZ.—In Pittsburg, September 30, Dr. C. Baelz, in the 58th year of his age.

GREGORY.—At Norwalk, Connecticut, September 2, Ira Gregory, M. D., in his 69th year.

HILL.—In St. Louis, Mo., September 25th, of convulsions, Robert C., infant son of Dr. R. J. and Luly Hill.

JOHNSTON.—In Philadelphia, on the 4th inst., after a short illness, W. Poynell Johnston, M. D., in the 28th year of his age.

MASON.—In Philadelphia, October 1, Dr. John K. Mason.

RICHARDSON.—In Brooklyn, October 3, Susan P., wife of Edward T. Richardson, M. D.

WHEATON.—The wife of Dr. W. Wheaton, of Jackson Four Corners, New York, was killed, recently, at a pole-raising at Randolph Centre. The pole broke, and struck her.

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Original Department.

Communications.

THE CORRUPTION OF MEDICAL COLLEGES.

By Stephen Rogers, M. D.,

Of New York City.

President of the *New York Medico-Legal Society*, etc.

Having heard from various sources that many of the medical profession are laboring under the delusion that certain charges I have made, in a general way, relative to the graduation of persons of criminal practices by medical colleges, are not sustained as respects the *University of New York, Medical Department*, I regard it a duty to the profession, to the public, and to myself, to send you for publication a few observations upon the history of these charges.

To say nothing about any other reasons for sending these observations to the Medical and Surgical Reporter, I may state that you are supposed to be perfectly free from any New York College or local New York influence.

Concisely then: I have charged that the *New York University Medical Department* has degraded the profession, by graduating persons who, at the time of graduation, or before that time, were, or had been, criminal advertisers, and that the Faculty knew at the time of graduation that at least one such graduate had such a history, and that the only means the Faculty had, in any of those cases, of knowing that the graduate was not, at the time of graduation, in the daily practice of crime, was the statement of the criminal himself. *These charges have been both proved and confessed.* (See New York *Medical Record*, March 15, 1872, p. 70; June 15, 1872, p. 247.)

I also charged that in one case said College graduated a perjurer. This charge has not been investigated.

I again charged the College with the practice of selling diplomas to persons of whose qualifications to practice the Faculty had no kind of knowledge, or means of knowing. (*Medical Record*, April 15, 1872, p. 117.)

That said college admits such practice is manifest by the following copy of a paragraph taken from a letter of the secretary of the Faculty to Dr. J. W. McC.:—

"Sir:—You can, by forwarding your diploma, or *other proper evidence of graduation*, and paying for one full course and graduation fee, $175, get the *ad eundum* degree.

"I have sent you a circular, and shall be glad to hear from you again.

"Very truly,

"Secretary."

Let the profession decide if the charges be true.

Thinking the matter of sufficiently serious import to require that measure, and one which would properly come within the professed scope of the objects of the New York Academy of Medicine, I recently preferred a formal charge against one of that Faculty,—who is also a Fellow of the Academy—to the Academy.

As I am simply seeking to defend a principle, and not to expose individuals, I shall omit names in this relation of facts.

The following is the chief substance of the charge preferred in the Academy:—

"I charge —— —— with having violated that part of the Code of Ethics of the A. M. Association which relates to the maintenance of the honor and dignity of the profession: In that he has recently signed a diploma issued from the Medical Department of the New York University to one —— ——, whom he knew to have been a criminal advertiser, and a person of generally disreputable character.

"Also, within a very few years, of signing a diploma issued from the same College to one —— ——, who, for a long time before, and at the time of receiving said diploma, was, according to the city directory, *a physician, resident in the city, in the street, and at the number, and had the same name and initials*, of a daily criminal advertiser, and was, beyond a question, the criminal advertiser himself.

"I still further charge him with equivocation and misrepresentation in the former case, in the interest of a confessed charlatan and malefactor, and in so far as he could, by such means, has conferred respectability upon, and has encouraged and abetted crime."

These are the most material points in the charge which I made against this member of the Faculty of the University, and upon which the Ethical Committee of the Academy reported substantially as follows:—

"Guilt would, under those circumstances, attach to the signer of a diploma only in case he alone knew of the character of the person. If all the Faculty knew of it and signed it, he would be exculpated, or at least, his act would be guiltless."

Query: Is this medical profession logic?

The committee here fall into a totally groundless error by stating that I admitted that the whole Faculty of the College were quite as well informed in the matter of the character and history of this disreputable aspirant to their honors as was the member against whom I made the charges. I never admitted anything of the kind, for I did not know anything of the kind.

It was for that very reason I could not and did not bring charges against every member of that Faculty who at the same time is a Fellow of the Academy. I only knew that the member of the Faculty whom I charged was acquainted with the facts, for the reason that I had informed him.

He had, indeed, stated to me that the information had been communicated to another member of the Faculty, but up to the time of the ventilation of the affair in the *Medical Journal* this was the only means of knowing that any other member of the Faculty than himself knew anything about the character of the pupil at the time of graduation. And even the *Journal* statements gave me, as I thought, and still think, too little reason for accepting that statement as sufficiently reliable for the basis of a charge. I shall probably never regard any statement of that member of the Faculty as *knowledge*.

The committee, however, have accepted his statements and the *Medical Journal* publications as *knowledge*, and very soundly concluded that all the Faculty who knowingly signed the diploma of a person of such repute are equally responsible before the public, though queerly enough, as we have seen, they do not think that any single one of the Faculty has any individual responsibility in the matter.

Upon that principle, a member of a society of thieves could only be found guilty and punished in company with the whole gang.

While, therefore, the committee "are," as they say, "very decidedly of the opinion that acts of a medical college by which improper persons become entitled to share in the rights and honors of the medical profession are legitimate objects for the consideration and action of the Academy of Medicine, and that for such acts the Professors of Medical Colleges who are Fellows of the Academy become amenable to the Academy," they decline to advise the Academy to undertake action in the case of my charge against a single member of the Faculty, alleging as a reason for their action, besides the extraordinary sophistry above given, "a scrupulous observance of the rules laid down in the 14th (meaning no doubt the 12th) by-law of the Academy."

That the profession may know all there is in said by-law touching the matter, I here quote the section entire:—

"§ 3. It shall be deemed a chargeable offence to countenance, encourage, or patronize, by advertising, giving certificates, or in any other way whatever, an irregular practitioner; or the proprietor or vendor of any nostrum, patent or quack medicine; *or to commit any act which unfavorably affects the character of the medical profession.*"

I leave the profession to decide if the daily association, as one physician associates with another, with persons notorious as being or

having been criminal advertisers, and signing their diplomas knowing this fact, thus elevating them to the same level with students and physicians whose histories have been those of unblemished honor and virtue, are not acts which unfavorably affect the character of the medical profession.

Finally, this translucent report winds up this part of the matter, in substance, as follows:—

"The action of the Academy on these charges against a single member of the Faculty would lead to one of two results: either to make this a test case, with the prospect of having possibly as many separate charges brought forward as there were participants in the questionable acts, or the Academy would make itself the instrument for singling out one of its Fellows as responsible for an act participated in by several Fellows and to equal extent.

"In either case, the principle of impartial justice which should guide the Academy in all its dealings would not be upheld."

The tender-hearted committee thereupon collapsed; and thus stands the renowned New York Academy of Medicine in this medico-criminal controversy. The profession will form its own judgment as to the relations, thus far shown, between the Academy and the broad subject of professional morals and standing involved in this issue. By way of interlude in this history of facts, it is both proper and important, as it shows the malignant animus with which this College has pursued its shameful practices, that the profession be informed that the moment I became convinced that the presiding officer of the New York Pathological Society had, with full knowledge of the history of one of these advertising criminals, signed his diploma, I resigned my membership in that Society, for the reason that I was unwilling to sit in an assemblage presided over by a person whom I regarded as an abettor of crime. Incensed at this expression of determination to spurn his society, and that of his co-abettors, some of his friends and accomplices in the doings of the University, finally, after sundry infamies which I will not here mention, voted to expel me, instead of accepting my resignation. "A rose by any other name smells as sweetly." Though the proceedings on the part of this disreputable clique of the Society were illegal, and practiced on frivolous pretences, I am thankful to be out of such company, whether it be called resigned or expelled. I am guiltless. Anything but crime. I never have and never will, knowingly, compound with crime. If a thief steals my watch, he can never pay me not to appear against him. If a man has practiced crime, he can never buy me to treat him as an honorable equal, and any member of a Faculty of a medical college who will do so, is, in my opinion, an abettor of crime. Such I regard the members of the Faculty of the University who attempted to defend their act of signing the diploma in question.

I would no more associate with them on terms of professional respect than I would with the holder of that diploma. Medical colleges are not chartered as reformatories, and have no business with repentance for sins committed, and I hope and believe that the profession will treat all such colleges as assume that function with the contempt they merit.

THE LATE CHAUNCEY F. PERKINS, M. D.,

Of Erie, Penna.

It has been so recently that we presented to our readers in the MEDICAL AND SURGICAL REPORTER several interesting communications from this venerable and eminent man, that the intelligence of his death will appear to many as a peculiarly sudden stroke. It occurred on the 24th of September, after a brief illness, at the ripe age of ninety years.

Dr. Perkins was the son of Eliphaz Perkins, M. D., a graduate of Yale College, and a physician of some note, who practiced medicine for many years at Athens, Ohio, to which place he removed from New England in 1793. The elder doctor was an ardent advocate of the cause of education, and interested himself actively in favor of the institution of the Ohio University, and is named in the charter of that College as one of its trustees. Chauncey F., the subject of our memoir, commenced the study and practice of medicine under the tuition and care of his father. He completed his studies at the Universities of Pennsylvania and New York, from which latter he received his degree of Doctor of Medicine. He removed to Erie in 1828, and has since then remained in that city and vicinity, engaged until lately in the practice of medicine and surgery.

Dr. Perkins was a man of medium size,

with an organization capable of enduring a good deal of exertion and fatigue. He enjoyed excellent health during his long life. His sight was scarcely impaired within a year of his death, and he was gathered to his fathers at a ripe old age, with faculties in a rare state of preservation. The mental characteristics of Dr. Perkins were a well filled and accurate mind, aided by a retentive memory, with a strongly reflective and philosophic tendency, leading to classification and generalization of ideas. His observing powers were strong and minute. Nothing within the range of his mental or physical vision escaped him, and each fact and idea took its place in the mental structures his active organization was constantly erecting for his own use, or the use of his fellow men.

There were three lines of thought that his mind was fond of pursuing, and which to him were a real luxury. Especially, first, was the profession in which he had been born and educated, in which he lived, and to which he clung until a wise Providence removed him to a larger and higher sphere of operation. Ever thoughtful and watchful, never destructive, he observed with intense interest climatic changes, epidemic developments, the effects of civilized habits on the general constitution of mankind, and the progress of medical chemistry and its new remedies. With the silent joy only known to the cautious yet ardent reformer and friend of his race, he added each newly discovered fact, each tried experiment, to the great mass of generalized truth which has been heaped up by centuries of labor, and thus made himself a part of that indispensable body of men who sift and reform without destroying. In his enthusiastic youth, his busy manhood, or in his decadence, when time was laying the cold hand of dissolution on the frame that for ninety years had served him, Dr. Perkins never swerved in his firm belief in the general correctness of that well-established system of medical aphorisms which had its origin before the Christian era, and has been handed down corrected and improved to our time. No wild revolutionary theories could, with him, nullify the truths established and revised during the progress of centuries, but he could and did assist to add to and modify such truths by personal attendance on medical associations, and by well-digested papers presented for their use.

Here one peculiarity of Dr. Perkins must not be omitted. It is a severe trial of character for an older physician, in a medical consultation, to permit younger consulters to urge their extreme and heroic ideas and treatment, and to force them, with the honest belief of conviction, on the consultation. In such case, for the elder to watch, to caution, to gently restrain—to select the wise and weed out the noxious ideas, and utilize the full information and fresh brain of the graduate, is high wisdom. To lead, while suggesting little, is a forbearance and virtue few possess. In this regard Dr. Perkins was especially valuable. No patient died from an over-dose of narcotic when he was a consulter. The judgment day alone may reveal the numbers he may have saved or benefited by a caution, a hint, or a suggestion. In estimating character, we must not omit what men refrain from doing. Impulse, enthusiasm, love of notoriety, urge forward. Prudence, justice, love of order, restrain. Here it will be hard to do justice to the memory of Dr. Perkins. In a religious excitement it is no ordinary virtue to stand by, an example of moderation and earnestness, of prudence and zeal, of restraining patience and ardent hopefulness; to allow the fresh feelings of youthful converts and the excited emotions of other members apparently to pass by and outstrip him; to watch with deep joy the rising and spreading flood of piety, and yet to feel the necessity of moderating the flood tide, and to remain quiet, and gentle, and firm, and only to regulate by example or passing hint, when much is done of which judgment disapproves, but accepting the slighter evil for the greater good; to "stand and wait" in the service of God when feeling and sympathy would urge forward with the crowd—this is piety and strength of no ordinary kind.

Dr. Perkins was brought up a Calvinist, and remained such; but the natural tendency of his mind led him to reflect much on theology. Before the close of his life he thought that many of the harsher features of the system in which he had been educated might be softened to accord with the weakness of humanity. The belief that the Deity was a Father who wished to correct and reform, rather than a despotic judge who desired to punish, was more in accordance with his own benevolence of temper, and he deemed it just to presume that no more suffering was inflicted than might be necessary

for the maintenance of the Divine government; and he indulged the hope that the strict legal interpretations of the great Reformer of Geneva might be received with some allowance for severity.

Another noticeable feature of our deceased friend was a habit of thinking over the reforms that might be introduced into municipalities, for an increase of the comfort and wealth of the inhabitants.

His death was eminently peaceful and happy, and in every respect perfectly befitting his character, both as a man and a Christian. In connection with these brief remarks, we publish immediately below the proceedings of the Erie County Medical Society upon the announcement of the decease.

At a regular meeting of the Erie County Medical Society, Dr. Loop, of North East, being President, Dr. Stewart announced the death of Dr. C. F. Perkins, with a eulogium on his life and character.

Dr. Wallace offered the following resolutions, which were unanimously adopted:—

Resolved, That in the death of Dr. Chauncey F. Perkins, Christianity has lost an exponent, Science has lost a devotee, the Medical Profession an ornament, and each of his co-practitioners a most valued friend.

Resolved, That the long-continued and healthful life of Dr. Perkins was a living lecture on the value of strict temperance, well-regulated habits, and restrained passions.

Resolved, That Dr. Stewart, Dr. Bennett, and Dr. Brandes be a committee to express to the family and relatives of the deceased our sympathies with their bereavement.

Resolved, That the President appoint a member of the Society to prepare an extended obituary of Dr. Perkins, and that the city papers be requested to publish it with these resolutions.

ERGOT IN HEADACHE.

By D. R. Silver, M. D.,

Of Sidney, Ohio.

Through the medium of the Reporter I wish to call attention to ergot as a remedy in headache.

I am not aware that it has been reported of use in that very prevalent affection and symptom of disease. Its physiological action is established. It produces contraction of the muscular coat of the arteries; "Is a special stimulant of unstriped, involuntary muscular fibre, wherever found," (Brown-Sequard). The causes of headache are many and various, known and unknown. Whether known or not, we frequently wish to give relief to a suffering patient, before the cause can be removed.

It is safe to assert that in a majority of cases of "sick headache," and of headache unaccompanied by sickness of stomach, we have hyperæmia of the brain. And it is just in these cases that ergot is most effectual. Yet I have seen good effects when there was no evidence of congestive hyperæmia, a state rather of anæmia. This apparent paradox is explicable only by supposing that the *arterial tonicity* produced favors the return of blood. Paradoxes are numerous in medical practice. "Venesection sometimes relieves the effects of anæmia of the brain." (Niemeyer.)

You can never certainly predict whether ergot will or will not do good in a certain case. I would have you try it, brethren, in every case, and you will often be surprised with the result.

A record of many cases assures me that it is better than any other single article of the Materia Medica, in this disease or symptom of disease. I recommend it to patients who are subject to the malady, thus:

℞. Squibb's fld. ext. ergotæ, gtts. x–xx.

For one dose. To be repeated every half hour until relief is obtained, or four or five doses are taken.

The primary effect of opium is to produce hyperæmia of the brain. To neutralize this action I employ with it fld. ext. ergot. The combination has a happy effect in cases in which opium alone would be contraindicated by the fluxion to the brain.

Let it be understood that I do not regard ergot as a specific for headache. But thousands of people are made miserable once a fortnight or once a month (especially women), who by the use of the above prescription may be made, for the time, comfortable. My experience with ergot in the headache of fevers is limited. But I would expect no good result from it, since the pain is then, probably, produced by the abnormal temperature and *quality* of the blood, instead of being occasioned by fullness of the cranial vessels, as once supposed.

Medical Societies.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

[Reported by J. W. P. Bates, M. D.]

Incontinence of Urine.

Dr Morris. My remarks will be confined almost exclusively to my own experience in the treatment of this disease. The text books afford us but little information in regard to its management, and we are compelled to rely on our own experience. I shall confine myself to nocturnal incontinence, and incontinence in children. During the last few years a number of articles have appeared in the medical journals in regard to the proper treatment, but nearly all of the remedies proposed seem to be at random, and the success in the use of them has been so slight, that incontinence has almost become an opprobrium of practical medicine.

In the old, incontinence is an evidence of some severe lesion, but it is not so in the young, and exists free from brain or spinal trouble. The causes which produce it in children are worms (that great bugbear of the maternal mind), acidity of the urine, irritation in the rectum, atony of the bladder and over-distention, general or local debility, nervous temperament, etc. We must ascertain the history of the child, and the family history, if we wish to contend with it successfully; the urine must be tested for acidity, the bladder and rectum examined, and every means used to discover, if possible, the cause of the trouble. If it depend upon acidity, an alkali and benzoic acid are all that are necessary; if from worms, an anthelmintic may afford relief; if defective nutrition be present, proper means must be taken for the improvement of the general health. The nervous is the most common form, and also the most amenable to treatment: most frequently met with in girls. In these cases I use syr. ferri iodidi, and it acts like a specific if combined with moral means. If there be nocturnal incontinence, I give atropia at bedtime. These are the only remedies that I can rely on. Strychnia is valueless in these cases, although it might prove efficacious in combination with syr. ferri iod. Bromide of potassium is almost useless, and tinct. cantharides entirely so. In the purely nervous form the urine is limpid, as in hysterical cases. The diet is important. I have no confidence in mechanical means. Have tried Sir Dominic Carrigan's collodion remedy, but it failed in my hands. May have been some defect in the collodion used. This is the only mechanical means that has any philosophy in it.

If incontinence can be produced by phimosis (which I am disposed to doubt), circumcision is the remedy. Trousseau's truss, injections of warm water, circular pad, reed to compel the person to lie on his side, and all mechanical means that I know of, are injudicious and useless.

I have but little to suggest in regard to the employment of moral means. It is only in cases of a purely nervous character that the old mode of treatment, viz., by scolding, shaming, etc., has any effect. The voluntary power from the cerebro-spinal system should be called into play, if possible. Hydrate of chloral is said to act very kindly, but I have not used it. I think it might be useful in those cases dependent upon spasm of the bladder. I have no confidence in any treatment not constitutional, as I consider incontinence an evidence of weakness, and we should endeavor to build up the system. The age at which children are most frequently affected is from two to ten years. I give gtts. x of the syr. ferri iod. three times a day. When it is nocturnal incontinence, I give atropia at bedtime. I am often called upon to treat vesical trouble as a result of uterine disease, and find atropia very useful in giving relief.

Dr. Evans. I have had some experience in the use of chloral. Some weeks since I prescribed grs. x, at bedtime, to a girl ten years old, who had suffered from nocturnal incontinence for some time. She has not been troubled since. I have frequently tried syr. ferri iod., but do not know that I ever derived any benefit from it.

Dr. Erich. I have not met with this disease so frequently in nervous cases as in strong, hardy boys, and mostly in winter. I directed woolen clothing, and gave full doses of quinia three times a day to produce wakefulness; made them go to bed early, and directed the parents to rouse them and make them evacuate the bladder about eleven or twelve o'clock. I have used the catheter to produce soreness of the urethra, so that as soon as the urine touches the part the pain will waken them.

Dr. Liebman. Prof. Burns, of Tübingen, relied very much on the use of the catheter. It was introduced every morning, and its use was persisted in for some time. Belladonna was used at bedtime. This practice was quite successful.

Dr. Walshe. I have had better results from the bromide of iron than from the iodide. In cases like those referred to by Dr. Erich, I give turpentine in ten drop doses until strangury is produced. It proves quite effectual.

Dr. Arnold. I have found this a very intractable disease in children. The vast majority of them are not cured. It is difficult to account for the fact that perfectly healthy children should be troubled with this ailment. I have often thought that the sphincter of the bladder, or the nerves that preside over it, did not go to sleep as soundly as the rest of the body. Owing to some constitutional peculiarity, it is not so soundly asleep, and the urine irritates the part and is expelled. Another thing I have remarked is, that nocturnal incontinence is often a symptom of nocturnal epilepsy. I could mention several cases in which it was the only evidence we had until the attention of the parents was called to the fact, and they were

instructed to watch the case. This has induced me to use large doses of the bromide of potassium. This controls, for a certain length of time, but does not effect a radical cure. I cannot say that I have cured a single case. I have used the iodide of iron, and belladonna, but have not met with the success claimed by Dr. Morris. In some cases it stops as they get older, in others it never does. In nervous cases, the recommendation to lie on the side and not on the back, has a good effect.

Dr. ERICH. I have known several persons who have lost this bad habit on approaching puberty. They were all great sleepers, especially during the winter time.

Dr. MORRIS. I agree with the remarks made by nearly every gentleman who has spoken. I must, however, differ somewhat with Dr. Arnold, as I think in a majority of cases it is a curable disease. As it is a functional disorder, we should persist in our treatment, and endeavor to arrest it at any early stage. I think chloral might be of benefit in cases dependent upon spasm of the bladder, and cure the disease by breaking up the morbid irritability. I perfectly cured a boy, seven years old, by two weeks' use of syr. ferri iod. Another case, æt. sixteen, has had no return for two months. Rousing the patient at ten or eleven o'clock, and compelling urination, is bad practice. I think we ought to avoid this, as it keeps up the irritation and thus perpetuates the disease. These cases usually void the urine more frequently than healthy persons. There is not the same control over the sphincter. Belladonna acts on the urine and makes it less irritating. I think it is far preferable to conium, hyoscyamus, or even opium. Dr. Arnold is doubtless correct in regard to its being a symptom of nocturnal epilepsy. It is always a sign of mental or physical weakness. The strong in mind and body never are its victims.

Dr. ARNOLD. I do not wish to be understood as intimating that incontinence predisposes to epilepsy, but its presence should lead us to inquire whether epilepsy is not also present. I consider it one of the most intractable of functional diseases of children. I have been baffled time and again, and I cannot understand how the two weeks' use of syr. ferri iod. can cure it. Iron is a very slow agent, and we must suppose that it required but a slight amount of medicine to restore the balance lost on account of some debilitating circumstances. As these cases are weakly, iron is always indicated as a tonic, not as a specific.

NEW YORK PATHOLOGICAL SOCIETY.

The Annual Meeting of the New York Medico-legal Society, for the election of officers for the ensuing year, was held Thursday evening, October 10th, at the College of Physicians and Surgeons, corner of Fourth avenue and Twenty-third street. The following gentlemen were chosen:—For President, Clark Bell, Esq.; First Vice-President, John C. Peters, M.D.; Second Vice-President, A. J. Delany, Esq.; Recording Secretary, Dr. J. Ross; Assistant Recording Secretary, W. B. Wallace, M.D.; Corresponding Secretary, Dr. I. F. Chauveau; Chemist, Dr. A. Wohlfarth. This gentleman died in Germany, of heart disease, and the Society was not aware of the fact. The vacancy will be filled at the next meeting. Treasurer, Dr. T. S. Bahan; Librarian, William Shrady; Trustees: Dr. Stephen Rogers, Jacob F. Miller, Esq., O. C. Warfield, Dr. T. C. Finnell, and Dr. Richardson; Pathologist and Curator, Dr. P. E. Donlin.

EDITORIAL DEPARTMENT.

PERISCOPE.

Recent Studies of Puerperal Convulsions.

Several writers have devoted their attention recently to the treatment of puerperal convulsions. We shall extract from their essays sufficient to show their conclusions on this important topic.

Dr. JOHN W. RICHARDSON, of Tennessee, read before the Tennessee State Medical Society a general review of two hundred and ninety-seven cases. The following is a summary of the tabular statement:—

Number of cases, 297; number of primiparas, 219; number of multiples, 75; had fits before delivery, 135; had fits after delivery, 57; number bled, 193. Result: mothers recovered, 224; mothers died, 71; children alive, 61; children dead, 72.

It will be seen, on examination, that the table is imperfect. This is the result of imperfect reports. Some had no notes of their cases, and could not answer all the interrogatories correctly; hence when certain numbers are added together they do not make the required amount. Some of the reports say nothing about the children, and consequently the number of births cannot be calculated. Of the number reported, however (133), it will be seen that more were born dead than alive.

PLANS OF TREATMENT.

On blood letting, Dr. RICHARDSON asks, Is it true that pregnant women have too much blood, and that this superabundance produces

hyperæmia of the brain, which causes convulsions? If so, the natural remedy, and the only one necessary, is to withdraw a sufficiency of blood to reduce the quantity to the normal amount. But we see convulsions in women whose condition teaches us, too plainly to be mistaken, that they have not too much blood. What causes them to have convulsions? It may be replied that, in the latter cases, the congestion is *passive*, while in the former it is *active*. Does congestion of the brain *produce* convulsions at all? Most certainly, in cases of unmistakable congestion of the brain, as we see it in other cases, stupor and coma, not convulsions, are the symptoms. It is true that there is coma in these cases of convulsions, but it is also true that it follows, and does not precede, the convulsions. May we not conclude, then, that the coma is produced by cerebral congestion, consequent upon the convulsion, whether it be in a plethoric or in an anæmic woman?

May not the symptoms attributed by some to general sanguineous plethora be produced by an unequal distribution of the blood, even when it is not superabundant? If hyperæmia of the brain is the cause of the convulsion, *this* must be true in the anæmic, because we know that they have a smaller amount, and of an inferior quality. In many women we see œdema in the feet and legs; in some it is very great, and is caused, doubtless, by mechanical means, pressure of the gravid uterus on the veins returning the blood from the inferior extremities.

We have seen some whose legs were so enormously swollen that the skin would split open, and the effused serum trickle down their legs in streamlets to the floor. These women look as if they did not have a drop of blood in their bodies. My observation induces me to believe that they all have a scanty secretion of urine, and very thin, poor blood. If mechanically, or by any other means, the return of the blood from the brain to the heart should be thus arrested or impeded, we should expect œdema of the brain; why not? Does not the asphyxia preceding the convulsion, and the failure of the heart to receive and distribute the returning blood, produce congestion of the brain?

As the convulsion approaches, the pulse becomes small and rapid. In the coma the pulse is fuller and slower; at any rate, this is my experience. The coma is deep and profound in proportion to the cerebral congestion, which is the consequence of the asphyxia, and the heart labors to remove it. If this labored action of the heart does not remove the congestion the coma continues, and the woman dies from congestion of the brain; precisely like other persons die from congestion or compression of the brain produced by other causes, and coming on under different circumstances. If it does remove it, consciousness, or partial consciousness, returns, the cycle is then complete; but the cause of the convulsion may not yet be removed, nor made inoperative; and we have a return of the convulsion.

I imagine that the cerebral congestion follows the asphyxia and convulsion, and, as a natural effect, in the anæmic as well as in the plethoric, being more defined, perhaps, in the latter. Venesection then suggests itself as a reasonable remedy, to assist the heart in removing the congestion from the brain. *This it may do*, but does it prevent a return of the convulsion? Certainly it does not, unless cerebral congestion be the cause of the convulsion. That this is the view taken by many is clearly deducible from the large and repeated bleedings practiced in this disease. If the cerebral congestion follows, and does not precede the convulsion, it would seem that other remedies might be more successful than venesection in preventing its return.

The premonitory symptoms of the attack do not usually portend *coma*, which always attends congestion and compression of the brain; but they generally foreshadow *convulsion*. I do not intend to say that coma *never* comes on unless preceded by convulsion, for we often see that it does; but not in puerperal attacks. It may now and then happen that a pregnant woman may become drowsy, dull, stupid, and finally comatose. And when this does happen she dies like a person from an apoplectic or paralytic stroke, or comes slowly out of the attack with partial paralysis. *She does not have repeated fits*, and finally wake up out of a long and quiet sleep, as though nothing unusual had befallen her. There is certainly something more protean, erratic, electric, in the composition of puerperal convulsions than can be explained by humoralism.

When we look at the reports in the table we see that there is much uniformity in respect to the treatment. Bleeding is used by some to remove hyperæmia of the brain, which they hold as the cause of the convulsions. Others bleed to protect the brain from the congestion which follows the convulsions, each one repeating the bleeding as long as the patient can bear the loss of blood, or until the convulsions cease; hence we see the large quantity usually abstracted, because bleeding scarcely ever arrests the convulsions.

It will be observed that cupping, cold to the head, blistering, cathartics, and antimonials, were the remedies usually employed in conjunction with venesection; and these failing to arrest the return of the convulsions, opium, in some form, was added; and latterly chloroform, chloral hydrate, bromide of potassium, and veratrum viride.

In the treatment of puerperal convulsions, always recollecting that if there was no uterogestation we would have no convulsions, we should keep constantly in view the importance of delivery as soon as it can be accomplished with safety to the mother. With those who believe that *hyperœmia* of the brain is *the cause* of the convulsion, and that its continuance produces a return of the convulsion, again and again, bleeding largely, antimonials, cold to the head, active cathartics, and derivatives,

will be their dependence and chief reliance. With them the cause is *centric*.

It remains yet to be seen how far the veratrum viride may be a substitute for bloodletting, and by what mode of action it is a substitute; or whether it is a substitute at all, in the sense in which it is used.

With those who believe that the cause is *eccentric*, originating in the condition of the uterus, its annexes, or adjacent organs, and that the nervous centres are in a state of hyperæsthesia, the treatment will, of course, be different. They believe that it is because of this hyperæsthesia (excessive irritability and sensibility) that the nervous centre responds to the demand which is made on it by those eccentric causes, in the form of convulsions; and that there are a few means only necessary or useful in the treatment. They do not believe that this nervous hyperæsthesia is produced by super-nutrition, or by hyperæmia of the brain, and consequently they are not the advocates of active depletion. They, too, fear the consequences of cerebral and spinal congestion, which inevitably follow the convulsion, and after relieving the former (or assisting what they can), they direct their attention principally to the prevention of the convulsion, which they expect to do by the use of such means as will put the cerebro-spinal system in such a condition that it will not recognize the demands of eccentric application, either by removing the cause, or by making it inoperative. They, too, claim veratrum viride, but chiefly chloroform and opium, and certain remedies known as nervous tranquilizers, to prevent a return of the convulsions; always, however, recognizing the fact that there is no security against the convulsion until the cause is removed.

DR. BRADLEY'S VIEWS.

In the "Proceedings of the Connecticut State Medical Society," Dr. W. Lockwood Bradley, of New Haven, Connecticut, writes on the same subject. He first discusses

THE PREVENTIVE TREATMENT.

The premonitory signs which precede an invasion of the disease are similar to those observed in Bright's disease of the kidney. They have been described by Dr. J. Hall Davis, of London ("Transactions of London Obstetrical Society," vol. xi, p. 270), in the following language: "Dropsical effusions, especially in the form of œdema of the face and upper extremities, associated with albuminuria and deficient urea in the urine, accompanied, in some instances, by the presence of cylindrical blood-clots, casts of the uriniferous tubes, with fatty epithelium." A knowledge of these signs is necessary to an early and successful adoption of *preventive* treatment; consequently, the urine of the pregnant woman should be examined chemically and microscopically, at least once in two weeks, during the last two months of pregnancy. This is especially important in primiparæ, in those in whom there is œdema of the face, or in whose urine albumen has been present or suspected in a previous labor, or at any other time.

Having detected the presence of these signs, or of well-known premonitory symptoms, we must vary our treatment according to the constitution of the individual. Moderate exercise should be enjoined, but all mental excitement should be avoided. If the patient is strong and plethoric we must seek to overcome any tendency to congestion of the nervous centres by giving an active saline cathartic, ordering an unstimulating diet, and, in rare cases, bleeding from the arm. If, on the contrary, the patient is anæmic and weak, a mild laxative and a nutritious diet should be ordered. In both sthenic and asthenic cases we are liable to have œdema and albuminuria. These conditions should be treated by cupping or counter-irritation over the renal region, and the production of free diaphoresis. In such cases, Prof. William H. Byford, of Chicago ("Treatise on Obstetrics," p. 444, 1870), considers the wine of colchicum an invaluable remedy, and advises its administration in as full doses as the patient can bear.

THE CURATIVE TREATMENT.

The *curative* treatment of puerperal convulsions should be introduced by the adoption of certain precautionary measures; injury to the tongue should be prevented by interposing between the teeth a piece of soft pine wood, cork, or other suitable substance; the clothing should be loosened, to prevent any obstacle to free circulation and respiration; the room should have a full supply of fresh air, and the movements of the patient should, as far as possible, be unrestrained. After these precautionary measures we should adopt such of the following methods of treatment as may seem best adapted to each case.

In order to remedy any possible irritation from the accumulation of excretions in the bowels, it is recommended that a powder of calomel and jalap should be administered; or, if the patient is unable to swallow, a drop or two of croton oil placed upon the tongue is preferable. To hasten the movement of the bowels an enema, rendered purgative by an ounce and a half or two ounces of castor oil, may be given. If necessary, which it very rarely is, the bladder should be emptied by means of a catheter. Through fear of exciting a convulsive paroxysm, all unnecessary irritation of the skin or mucous passages should be avoided. For this reason, and because of their comparative inefficiency, the application of sinapisms to the feet, and of cold to the head, are rarely employed.

Passing now to the consideration of methods of treatment which are more or less debatable, we find that nearly all obstetric authorities are agreed as to the value of bleeding when employed *locally*. M. Cazeaux would confine its employment to cases where the convulsions

have followed a profuse hemorrhage. Some value it because it acts as a counter-irritant, and also because the quantity of blood can be accurately measured.

Regarding the employment of *general* bleeding there is great diversity of opinion. If the patient is feeble, and the pulse weak and quick, we must place our reliance upon other remedies. Prof. T. Gaillard Thomas, of New York, at one of his recent lectures, related a case, seen by him in consultation, where an attempt was made to diminish the flow of blood to the head by passing a bandage around the leg; the patient had previously been bled as much as seemed advisable.

VALUE OF CHLOROFORM.

In the year 1848, Dr. Richet, of France, first employed chloroform with success in the treatment of puerperal convulsions; in the same year Simpson, of Edinburg, experimented with it, and at the present time its utility, at least in a large proportion of cases, is well established. It has been claimed that the necessity for bleeding will be diminished in proportion to the frequency of the administration of chloroform at an early period of the attack. On the other hand, the advocates for blood-letting, who employ chloroform as an adjuvant, argue that, in the majority of cases, the patient is not seen until several convulsions have occurred, and that frequently pulmonary congestion (indicated by lividity of face and quickened respiration) must be relieved by blood-letting before chloroform can be safely administered. The employment of chloroform will be successful for the amelioration or prevention of the convulsive paroxysms in proportion as its inhalation is commenced at an early stage of the disease. Dr. Carl Braun reports sixteen cases treated by chloroform, all of which recovered. This is a degree of success which is certainly unparalleled, and the repetition of which can scarcely be expected; for this reason, the recommendation made by him as to the manner of administering chloroform is especially worthy of remembrance. He says that if chloroform be not administered in time to cut short a paroxysm, as much atmospheric air as possible should be allowed to enter the lungs during the convulsive attack and the coma immediately succeeding. Under such circumstances the respiration and the circulation are very much impeded, and we can understand how the administration of an anæsthetic would be apt to increase the difficulty to a dangerous degree. As soon, however, as the respiration becomes easy, the inhalation of chloroform should be commenced, and carried to the production of complete narcosis; nothing short of this will completely arrest the convulsive manifestations. It is impossible to lay down any rule regarding the proper duration and intensity of the anæsthetic sleep. In severe cases, where the paroxysms tend to increase in force and frequency, it should be continued for three or four hours, then suspended for a time, only to be recommenced if convulsions are threatened. By a judicious interruption in its employment it can be continued for twenty-four hours, or longer. In certain cases bleeding is inadmissible or insufficient, and chloroform faithfully administered either does not prevent the recurrence of the convulsions, or its use is counter-indicated on principles which govern its general employment. Dr. Elliot (op. cit.) reports a case in which he was obliged to suspend its use because the breathing suddenly stopped, and the pulse ran down in a most alarming way. In such cases other remedies have been employed as adjuvants or substitutes.

CHLORAL.

During the past three years a few cases have been reported in the journals showing successful results from the employment of the hydrate of chloral. The bromide of potassium has been given, in doses of a half to four drachms, both before and after delivery, and, in mild cases, with good results. The late Dr. N. B. Ives, of New Haven, was accustomed, in his treatment of convulsions after delivery, to rely upon the administration by enema of one drachm of tincture of stramonium; and his practice has been indorsed by the experience of other practitioners in the same place. When the attack is somewhat subsiding, it has been recommended by the highest authorities to give an opiate. Dr. Collins, of Dublin, would restrict its employment to cases where the paroxysms continue after delivery. Believing that opium increases cerebral congestion, Tyler Smith and Cazeaux, in common with the majority of French accoucheurs, are opposed to its employment, except in cases of anæmia, or where a large amount of blood has been lost. When the administration of opium is indicated, it should be given in doses sufficient to produce a positive soporific effect.

Sometimes the comatose condition of the patient, or the rapid succession of paroxysms, prevents the administration by the mouth of opium or other remedies. These obstacles to medication are overcome by the hypodermic injection of a solution of morphia. Unlike opium, it does not produce cerebral congestion; and, as in the case of one full bleeding, we gain an additional advantage from the rapidity of its action.

DR. MONTGOMERY'S VIEWS.

Another summary of treatment is given by Dr. E. Montgomery, of St. Louis, in the St. Louis *Medical and Surgical Journal*. He says :—

On being called upon to treat a case of puerperal convulsions, of either the epileptiform or apoplectic variety, if the patient was robust I would employ venesection freely, even if the patient was in the midst of a paroxysm; I would apply ice to the head and upper part of the spine, and if the patient could swallow, and the stomach were in a condition to retain it, I would give a brisk purgative of calomel and

jalap or croton oil. After the bleeding and the administration of the purgative I would put the patient under the influence of chloral hydrate, giving fifteen or twenty grains every two or three hours, until I felt certain that the convulsions had ceased. If the cathartics and the chloral could not be retained on the stomach I would give them *per rectum*. In administering chloral hydrate I think it important, with a view to safety, to give it in a dilute solution, and never to repeat the doses at too short intervals. I generally order two drachms in four ounces of spearmint or cinnamon water; a tablespoonful of this solution in a tablespoonful of syrup for a dose.

I feel confident that nearly every case, if taken promptly at the commencement of the attack, will speedily yield to the above treatment. During the past three years I have attended, or visited in consultation, eight cases, six of which were believed to be of the epileptic form and two of the apoplectic variety, and they all recovered, although one of the patients had endured five violent convulsive paroxysms before the chloral was administered.

Besides the free purgation, attention should be directed to the urinary organs, to see that free uresis should be enjoyed; and as long as any heat of head, flush of countenance, or muscular jactitation exists, the ice bags should be applied to the upper portion of the spine and to the head, and the sick room kept well ventilated, dark, and quiet.

VALUE OF CHLORAL.

I greatly prefer the chloral hydrate to the chloroform or the ether and chloroform treatment. I think the chloral is much safer, and it can be administered safely and efficiently by any sensible and experienced nurse.

If we witness the treatment of a case as I have indicated, and then read over some of those described by Dr. Dewees and others, where no chloral was used, we will rejoice and feel grateful that we have a remedy that can calm the phrenzied brain, soothe the troubled nerves, and even disarm Death of his terrors.

In asthenic cases, or in the nervous or hysteric forms of the disease, venesection, strong purgatives, or other depleting and depressing remedies will not be required. A few good enemas of turpentine and assafœtida, and keeping the patient under the control of the chloral hydrate, will be the chief medication required. Of course, good nursing, proper dietetic and hygienic measures, and perhaps some nervine tonics, will be necessary.

In cases occurring during labor it has been very common practice to expedite delivery by every means available, in many instances using severe and forcible measures to accomplish that object. In my humble opinion this practice is highly reprehensible; for if the uterus is not freely dilated, and the child well down in the pelvis, it will be immensely safer for the patient to keep her under the influence of the chloral until the forceps can be easily and without risk applied, instead of forcibly dilating the uterus, and turning the child, or dragging it away by the aid of instruments. In my experience, if the convulsions occur during the process of parturition, a large venesection, free purgation, and the influence of the chloral, will most happily expedite delivery, or at least promote that desirable condition which will enable us to assist nature in her efforts to empty the irritable organ. Of course, if at the full period of gestation, as soon as it can be done with perfect safety to both mother and child, we would not hesitate to use the forceps; but would refrain from having recourse to version unless there was no other resort promising equal advantage. In the chloral hydrate we have a remedy by which we can keep the patient easy and comfortable, and we therefore need be in no hurry to use violent or extreme measures.

In a recent case of severe eclampsia gravidarum, although the patient had suffered from the fifth convulsive paroxysm before the chloral hydrate was administered, it effectually soothed and relieved her, prevented any return of the spasms, and greatly contributed to the speedy and fortunate issue of the case.

So happy were the effects of the remedy in this instance that the lady insisted on taking a dose every night for a week after she had passed the paroxysm, saying that it caused her to pass the night so comfortably, and inspired her with such confidence in a hasty recovery. This was a very severe case of the apoplectic form of eclampsia, occurring in a very robust lady, aged thirty-six, in her eighth month of utero-gestation, of her sixth pregnancy. The convulsions were frightfully severe, about two hours apart, with stupor and great mental aberration between the paroxysms, the pulse unnaturally slow and hard, the pupils contracted, the whole surface almost black during the spasms, and remaining livid between them, and on the whole a very unpromising case; and yet the chloral hydrate, although not given until after the fifth convulsion, promptly arrested the spasms, and we believe saved the patient from a sudden death.

The Permanence of Syphilis.

Dr. Fournier, as quoted in the *New York Medical Journal*, says :—How shall we reply to a patient who, at his last visit, puts the following question to you, which you may be sure he will do : "Now, doctor, am I finally rid of this disease? Do you think that I am radically cured?"

To this you must reply as you think, and as science warrants you to think and to hope. Now, what you really think is that your patient has every chance of being free from syphilis now and forever. You are, in a moral point of view, warranted in saying this.

But you also think that, in spite of your long and active course of treatment, this patient might be exposed at some future day to new

and later manifestations. For, unfortunately, there is no sign which permits us to *affirm a cure in syphilis*, for it is, as M. Ricord says, "neither the dose, nor the pharmaceutic preparation, nor the duration of the treatment, which confers an absolute immunity, or which can guarantee the radical extinction of syphilis." It is necessary to say this to your patients.

We may promise health or a cure to a person dying either of phthisis or cancer, perhaps, for that is a pious lie, and is a consolation which, in our helplessness, we owe to our unhappy patient, and which it would be cruel to refuse; but to a subject in full health, who enjoys all his faculties, and who, moreover, we are almost warranted in believing to be forever rid of his disease, we owe the truth, and that only, and it is for his benefit that he should know the truth.

Should a syphilitic manifestation develop upon such a patient, say ten, fifteen, thirty, or forty years after contagion, it is possible that it would not call to his mind the remembrance of a disease a long time vanished and almost forgotten, and that the physician, not being aware of his syphilitic history, might not recognize the syphilitic character of the lesions, more especially as these later lesions are far from presenting a typical syphilitic appearance. This may be a lesion of a viscus, a tumor in the brain, a sclerosis of the cord, an amaurosis, or it may be a hemiplegia or a paraplegia. Now, in the eyes of a layman, what connection could be associated between this manifestation and an old sin of youth past, and gone, and expiated years ago? What is the necessity of making a full confession to the physician, and of reviving such compromising reminiscences? The result would be that the patient would say nothing of his previous syphilitic history, and the physician not being informed, would run the risk of mistaking the nature of the trouble. In this case, the lesion not being understood, it is not treated with the only remedy which is beneficial for it, therefore it persists and follows its normal evolution, and may result in a grave or fatal termination, when otherwise it might have had every chance of being cured if it had been traced to its true origin and treated by its specific. You may be certain of the fact that a number of persons having tertiary syphilis have become afflicted with incurable infirmities, or even have died simply from the fact that a late syphilitic lesion has not been recognized and treated as it should have been. Now, it is necessary to warn your patients against this possible contingency. The possibility of tertiary lesions manifesting themselves in the future makes it of importance that our patients should be fully and clearly made aware of their true state when we dismiss them as cured.

Never forget this when one of your patients, at his last visit, shall put this serious question to you: "Am I cured?" Do not neglect to tell him what you think, and, as an adieu, give him this salutary but very essential advice:

"Yes, I think you are cured. I think science will warrant me in saying that. But whatever may happen to you in the future, whatever disturbances you may have to your health, *remember your old disease.* Tell your physician of it. Do not at any hazard fail to acquaint him of your syphilis. Tell him plainly, ten times rather than once, that you have had syphilis in earlier days. It is probable that this information may be of no service to him; but it may happen that it is very important for him and for you especially, for upon it your cure and perhaps your life may depend."

Poisonous Bite of a Species of Domestic Spider.

Dr. G. C. Paoli writes to the *Chicago Medical Journal*:—

I was called the eighth of July, in the afternoon, to see a boy four years of age, who previous to my arrival had been playing in the yard. On examination I found in the middle of the right leg a small elevation on the skin, which is called a papula. Neither swelling nor heat were perceptible, but the skin around the papula was very sensitive to the touch. Every attempt to stand on the leg produced the most excruciating pains. After careful examination, I concluded that my patient had been stung by some kind of an insect, but none of his playmates of the same age could give me any information that might corroborate my conjectures. I prescribed for the night a weak solution of permanganate of potassa, as an external application. Two hours after I had arrived at my residence I was recalled, and informed that the patient was suffering from an inguinal hernia. To satisfy the parents I called again later in the evening, and found there was no rupture as they feared, but that one of the inguinal glands was somewhat swollen, as an effect of the irritation produced by the poisoned wound. We often find that small wounds or ulcerations in the lower extremities occasionally produce the above effects. The next morning on visiting my patient I found the following symptoms: The whole limb was swollen, and the temperature of the skin increased; pulse 130. He had been vomiting; tongue slightly coated; bowels constipated; urine scanty; very restless and sleepless. The whole limb was very sensitive to the touch. I ordered an emollient poultice, and, internally, carbonate of ammonia. In the evening I gave him an injection to move his bowels, and codeia to produce sleep.

The third day, the pulse the same; the tongue dry and coated; had dozed a few hours; bowels moved. The fourth day, erysipelas appeared on the whole limb, involving the subcutaneous tissue. After the application of iodine the erysipelas was dispersed about the twelfth day, but on the fourteenth day a similar swelling and erysipelas also appeared, involving the whole left limb. During his illness

he was several days delirious, and rejected all kinds of food except cold milk.

Remarks on the case.—About the eighth day after he was taken sick, I was informed that a gentleman living in the house saw a spider of brownish color with a yellow tint crawling on my patient's leg; he instantly killed it. According to the description, I supposed it was a species of spider which is by no means rare about Chicago. There have been the most exaggerated descriptions of the nervous symptoms caused by the bite of the Italian tarantula. We find the symptoms of chorea precisely similar, but in this case the nervous symptoms were entirely absent. I must add that the poison was a long time lingering in the system, and it took my little patient six weeks before he could walk and regain his strength.

Cold Water Treatment of Typhus.

A report furnished by Dr. Scholz, the director of an establishment at Bremen, states that since the year 1868 125 cases of abdominal typhus have been hydropathically treated in the Bremen Infirmary, of which 82 were men, and the remainder females. The mortality was scarcely four per cent. The plan adopted was immersion in water at a temperature of from 10 to 20 deg. Cent. (50 to 60 deg. Fahr.) The temperature was taken every three hours, or in bad cases every two hours: in the axilla a temperature of 39 deg. C. (102 deg. F.) was considered as an indication for a bath. When immersed the patient either moved himself or was lightly rubbed. The duration of the bath was from ten to fifteen minutes, or in many cases, not more than five or six minutes. He was placed in bed without being dried, and was covered with a woolen coverlet. When the brain was much affected, cold douches were directed against the head whilst the patient was in the bath, and ice-caps were occasionally used. Cloths dipped in cold water were placed at intervals of a quarter or half an hour upon the chest and belly. These appeared to exert a favorable influence upon the diarrhœa, and were felt to be agreeable to the patient. Scarcely any drugs were administered. The diet was light but nutritive. Scholz regards the withdrawal of heat as the main object of the cold baths: he does not attribute much value to them as agents for producing a better distribution of the blood, or as acting upon the nervous system, or improving the function of the skin. Hence, in very severe cases, where there is no material augmentation of the animal heat, he does not think it right to use them, but brings the skin into action by powerful thermic and mechanical irritation (frictions.) The general results of the reduction of the mean daily temperature in typhus, caused by the baths, are that the course of the disease is milder, the type of the disease more simple, and the cure more certain and expeditious. In four per cent of the cases, intestinal hemorrhage occurred, for which full doses of the perchloride of iron were administered. Among the secondary diseases that were observed were peritonitis from perforation, two cases of articular rheumatism, and some cases of erysipelas and abscess. In two fatal cases, ulcers of the larynx were observed. In convalescence from severe cases, temporary hyperæsthesia of the toes was observed. Relapses occurred in four per cent. of the cases. Scholz distinguishes two periods in the treatment of the disease. In the first or early period the patient must not be bathed at night, and not more than five times during the day: whilst in the second or later period the number of baths may be sufficient to keep down the temperature of the body to near its normal degree. The same plan of treatment was tried and found very advantageous in scarlet fever, measles, diphtheria and erysipelas.

Diagnosis of Iritis

In an article read at the meeting of the Illinois State Medical Society, held at Rockford, May, 1872, by E. L. Holmes, M. D., of Chicago, and published in the *Chicago Medical Journal*, he says:—It seems to me our best works scarcely dwell with sufficient emphasis on the difficulties which may embarrass the student in the diagnosis of this disease.

A typical case of iritis, even in its early stages, offers little difficulty. The symptoms upon which a diagnosis is based are irregularity, contraction, and immobility of the pupil, discoloration of the iris, with loss of the brilliancy of its surface, turbid condition of the aqueous humor, pink zone around the cornea, photophobia in and about the eye, pain, and diminution of sight from turbidity of the aqueous humor, or exudation upon the crystalline lens.

Not unfrequently these symptoms are masked. From the very onset there may be not only considerable œdema of the conjunctiva of the globe, but also of the whole lid, with no marked change in the appearance of the iris or pupil. Such an attack could be easily mistaken for simple conjunctivitis. The terrible pain, so often experienced in iritis, is sometimes absent. The pupil is not always, at the commencement, irregular. In some forms of the disease the inflammation is confined almost entirely to the posterior layers of the iris, producing no exudation upon the pupillary edge, and scarcely any redness or irregularity.

Many of the symptoms of iritis are present in some forms of keratitis. We have redness, photophobia, contracted and immovable pupil, dimness of vision, and apparent turbidity of the aqueous humor, with apparent want of brilliancy of the surface of the iris from a cloudy condition of the cornea.

I allude to this subject, from the fact that vision of very many eyes is partially, or even totally, lost, because an improper diagnosis is made, and, in consequence, injurious treatment instituted. It is seldom that a mistake would be made, if the practitioner would take the

trouble, in cases where doubt is possible, to instil a drop or two of solution of *atropiæ sulph.* (gr. iv to the ounce) into the eye. If iritis is present there is scarcely a possibility that the pupil will not dilate irregularly, which is, perhaps, the most important symptom in diagnosticating iritis.

I do not wish to dwell on the treatment of iritis, but will simply add that the free local use of atropiæ sulph. is of chief importance. The patient should be kept at rest, free from exposure to light. Pain may be relieved by subcutaneous injections of morphine. There is reason to believe that mild but continued doses of calomel serve, in a great degree, to shorten the course of the disease, although it is far inferior in value to atropine.

Treatment of Uterine Tetanus.

Dr. Alexander Milne, of Edinburg, after referring to the extreme difficulty of performing podalic version, where the liquor amnii is absent, or has long escaped, where the parts have become swollen and dry, and the uterus has contracted firmly around the fœtus, describes, in the *Lancet*, the means which he has found most beneficial in enabling version to be effected. In the first place, he considers chloroform should be administered, and very freely too; in many instances it relaxes the spasm in a wonderful manner, but he has seen it fail frequently in uterine tetanus. In the next place, when chloroform is ineffectual, recourse should be had to tartarized antimony and lobelia inflata. A grain of the former may be given, and twenty-five minims of the tincture of lobelia inflata; after the lapse of twenty minutes the patient should be placed under the influence of chloroform. The triad form a potent antispasmodic whose conjoint action is almost irresistible, and the spasm is overcome. The uterus being relaxed, the hand finds entrance, and version becomes a possible thing. In regard to the hand to be employed, which he considers to be a matter of capital importance, he holds that the left, in the great majority of cases, is the proper one to employ. It is the best in all dorso-anterior cases, and better success is attained with it than with the right, even in dorso-posterior ones, where there is fluid and space. Lastly, in reference to the point whether one leg or both should be seized, Dr. Milne observes that "in difficult cases, to speak paradoxically, we can neither afford to seize both nor to want both; that is to say, there is little room to enable us to get hold of both, but it is better to have both if at all practicable. The fœtus will then revolve more readily, and come down more speedily." Dr. Milne records a series of cases which support his views.

Ovarian Cyst in a Child Eight Years Old.

Dr. C. G. Goodrich, of Minneapolis, reports the following case in the *Minnesota State Society Transactions*:—

My attention was called to —— ——, aged eight years, during her convalescence from typhoid fever, her parents having observed that the tympanitic distention of her abdomen did not disappear as in other members of the family who had also been ill with fever.

Without making a careful examination, I attributed it to excess in eating, and deficient exercise; prescribed a laxative, and heard no more of the case for three days, when on making a more thorough examination, I came to the conclusion that my patient had an ovarian tumor.

She was seen by Drs. Ames, Hill, Lindley, and Kimball, who could not fully agree with my diagnosis, on account of the impossibility of so young a girl being the subject of ovarian disease.

The youngest recorded case of ovarian cyst is one mentioned in the *British Review*, in the person of a child aged 11 years.

Her abdomen continued to enlarge; I introduced a trocar (having previously made an exploratory puncture), and drew off eight pints of thick, yellow, glutinous fluid, much to her relief, and which was followed by rapid and encouraging improvement.

On the sixth day, however, the abdomen had commenced to enlarge, and on the fourteenth day from the first puncture I was obliged to relieve her by tapping, followed by a third operation seventeen days from the second, removing a much larger amount of fluid than on previous occasions.

From this time she failed rapidly, the most efficient remedies employed to cause absorption, and every effort to maintain her strength, being of no avail.

The autopsy revealed an ovarian cyst, with extensive adhesions to the peritoneum and liver.

Reviews and Book Notices.

NOTES ON BOOKS.

——Appleton's handsome work, "*Picturesque America*," is finding a large sale. The agent for Philadelphia is Mr. William Tweddle, 725 Sansom street, formerly Lieutenant 13th O. V. C. We recommend him to the medical fraternity of this city as an old acquaintance.

——Dr. Bossu has recently brought out a new edition of his excellent treatise on Medical Botany. It is entitled:—

Traité des plantes médicinales indigènes, description, propriétés, usages, récolte, préparations et indications thérapeutiques; précédé d'un Cours élémentaire de botanique, organographie et physiologie végétales, classifications, caractères des familles naturelles, des genres et des espèces; accompagné d'un atlas de 60 pl. en taille-douce, 1100 dessins, plus 92 fig. intercalées dans le texte.

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S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

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ON THE COOLING OF HOUSES.

Concerning the warming and ventilation of dwelling houses, public buildings, and hospital wards, there is no lack of literature; but how to keep buildings cool in extremely hot weather, is a new field for the admirer of healthy homes. A very important field it is, too, not in respect of comfort merely, but of health.

This past summer, in spite of the enormous exodus of their population, estimated at fourteen per cent., the mortality returns of New York and Philadelphia were double and triple their ordinary figures in the hottest weeks of July and August. Suffering, disease and death, are vastly augmented in all our northern cities in these months.

Hence we attach no little importance to suggestions looking toward means of reducing the temperature at such times. We have known physicians to recommend the hanging of wet sheets in sick-rooms, and similar devices, to allay the oppressive heat. Far better would it be could some device be put in operation which would lower the temperature at will, promptly, permanently, and without excessive dampness.

We have collected several such suggestions, and though none of them answer our wishes, we give them as stimulants to further inventions.

A writer in the New York *Nation* said:—

I shall try to cool air down to 60° or 65°. I think there will be no difficulty in effecting it in the following manner:

I mean to lead a considerable number of small air-pipes several times through a very large box or bin, which is to be packed full of some light substance, moss, for instance, through which air could easily find its way. Water from above will be suffered to drip all over the top of this moss, and will trickle through it to the bottom of the bin. Through the moss, from the bottom upward, I shall force a current of air, and thus produce rapid evaporation. And this will cool the air-pipes, and they will cool the air which passes through them. To force a current through these pipes, and to force another one through the moss, I shall use a very large, but light pair of bellows; and the bellows will be worked by a sort of clock arrangement, in which the immediate motive power will be a heavy weight. I calculate that a horse will, with ten or fifteen minutes' heavy pull (once a day or once a week, according to the heat of the weather), wind this clock affair. It shall have a pendulum, and be started or stopped at pleasure, and by altering the length of the pendulum, will run fast or slow according to the heat. The cold air which the air-pipes furnish will be led through cheap wooden pipes to the various rooms of the house, always near the ceiling, and be turned on or off like the hot air of ordinary furnaces. My doors and windows will be kept closed in the hottest weather, as carefully as in the coldest. I shall have no flies, nor mosquitoes, nor dust. My blinds will be open and my rooms light. The air will be as dry as that outside, and the temperature of it will be between 60° and 70°, according to my belief as to what degree may be the healthiest. I have not carefully estimated the expense of this machine, but I am sure it will not cost much, and am equally sure that the extra work it will enable me to do in the hottest weather will soon repay me for the outlay.

Several correspondents of the *Scientific American* have come forward with plans not dissimilar in principle. One says:—

At the time of erection (or afterwards),

tunnel or excavate from the basement, 4 feet below the surface, any distance practicable from the dwelling; brick this tunnel, or lay an iron tube of proper size, and connect it with an air chimney (the higher this chimney, the purer the air, and the greater the distance from the building, the greater the modification of the heat); connect a small tube, leading to each room, to this air passage at the basement, and direct as may be desired for heating purposes. This simple plan will not require any rotary blower or the extra expense of an engine, if the flues and passage ways are arranged properly in the building, and with a greater elevation than the top of the air chimney. The air passing under ground in this manner will be pure and cool in summer, and the cold will be modified in winter; and the method will save a great per cent. of fuel during the months of the latter.

It is doubtful if this latter would answer. Some artificial means of cooling the air should be devised; some plan, cheap, simple, and easily applied, without the cost of lofty chimneys, engines, etc.

The study of the subject must begin with a consideration of the various methods at our disposal for the artificial reduction of temperature. Rapid evaporation is the most potent of these. It is also very manageable. The ice making machines extensively used in many northern cities employ it. Very light products of mineral oils are often chosen for the purpose. Mr. Hughes' patent for producing artificial cold, granted last year in England, may serve as a general example of these machines.

In this invention the general means of producing the cold is by the evaporation by mechanical means of volatile liquids. Two classes of liquids are employed under different modifications of the apparatus: one, those volatile liquids which are either insoluble or but sparingly so in water, the other, those that are very largely soluble. For insoluble liquids the apparatus is so arranged that the volatile shall cool a liquid by its evaporation in contact with it, either while running down thin sheets or one liquid rising in bubbles through the other, and the vapor recondensed in like manner in immediate contact with cold water. For the other class, of which ammonia is taken as a type, the liquid is evaporated in the ordinary way, but condensed by being thrown into aqua ammoniæ kept at ordinary temperature by cooling pipes, and this aqua ammoniæ is cooled for a refrigerating liquid by being injected into a second pump, which liberates much of the gas from the solution, and afterwards throws out the cold solution for freezing purposes, and the ammoniacal gas to be recondensed in the above aqua ammoniæ kept at such ordinary temperature.

A modification of such machines, adapted to the purpose we have in view, would be easy.

The flues and pipes used for conveying and radiating heat in winter should be adapted to conducting cold air in summer. The cold air itself should not be driven into the room, but a cold surface (in the plan of steam heating pipes) should be exposed in a room or ward, sufficient in size to modify the temperature as desired.

What a grateful relief this will prove (for we have no doubt it will be put in practice ere long), those who have tossed on a sleepless and feverish couch in our midsummer heats, will appreciate. It will ultimately be adopted in all first-class hospitals, as an essential to the comfort and convalescence of the patients.

ADDITIONAL NOTES ON THE ADVANCE OF THE CHOLERA.

The peculiarities to which, in a recent editorial, we called attention, as exhibited in the present epidemic, namely, that while the disease in single cases is as malignant as ever it was, yet it travels far more slowly, and spreads in a given locality much less rapidly, are illustrated also by its history in Arabia during the past season.

We traced it in its march westward through Europe, in our last article; we

shall now sketch its progress along its other line of approach, Mecca and the Red Sea. At the close of last February the religious ceremonies at Mecca had brought together 110,000 pilgrims at that city. Not a single case of cholera was reported among them. The ceremonies being over, they commenced to return home. Suddenly, on the last day of the month, a number of cases of cholera broke out in the caravans that were leaving the city, among the mendicant orders.

Word was at once sent to quarantine the vessels which had already started, at El Wedj, where a sanitary station had been erected under the care of Dr. Da Corogna, a graduate of the Ecole de Medicine of Paris.

Meanwhile, on the route from Mecca to Medina, the epidemic raged with violence. About 25,000 pilgrims passed over this route, of whom at least 4000 succumbed to the disease between the 1st and 29th of March. Of 16,000 pilgrims who had passed through Egypt on their way to the ceremonies at Mecca only 11,687 returned, showing a mortality of 4.313, or about 25 per cent. of the total number. In spite of this terrible fatality, the disease did not show the same tendency to expansion which had been observed in all previous epidemics.

Neither Mecca nor Medina suffered severely, the deaths from cholera in the former amounting to but fifteen a day in March. Not a single case of cholera appeared among the 9000 or 10,000 pilgrims, after their quarantine at El Wedj. This quarantine varied from fifteen to twenty days, and no doubt was very effective in preventing the germs of the disease from being carried to Cairo, Alexandria, and Europe.

On the whole, a careful survey of the field this fall shows that there is less reason than a year ago to fear an extension of the epidemic over Western Europe and America; the line between Asia and Africa and Europe is better guarded by sanitary establishments; the disease itself, though as fatal in individual cases as in the most virulent epidemics of former years, spreads more slowly; and although treatment is as useless as ever, and although the disease seems almost naturalized in Europe (at Kiew and vicinity), we need feel little alarm about any further disasters from the present extension of its voyages.

Notes and Comments.

Training the Nervous System.

Dr. J. M. Winn calls attention, in the pages of an English contemporary, to the truth that the exercise and diet compatible with the best intellectual vigor differs from that adapted to the utmost muscular strength. He remarks:

If we keep in view the difference between the structure of the nervous and muscular tissues, it becomes evident that a somewhat different kind of diet is required for the nutrition of the former from that of the latter. In order to develop and support the muscular organization, a large proportion of animal food is requisite; not so, when the object is to supply the waste of the more delicate and subtle tissue of the nervous system. Fatty matter and phosphorus enter largely into the composition of the brain. It has been estimated that the former (brain-wax, or brain-fat, as it has been called) amounts to about one-third, and the latter (phosphorus) to one-twentieth or one-thirtieth of its solid substance. It is now generally believed that exertion of the will and reasoning powers cause an expenditure of the brain-material, and a corresponding exhaustion of the nervous force. However, it must not be forgotten that prolonged bodily exercise exhausts the nervous force, as muscular contractions are commonly brought into action by nervous influence; hence the importance of a student's avoiding excessive bodily efforts, which expend that nervous energy so essential for brain-work.

He should take gentle exercise for at least two hours daily in the open air, and his diet should be light, simple, and nutritious. Large quantities of animal food and malt liquor conduce rather to somnolency than to mental activity. There is a common say-

ing that "fish feeds the brain," which may depend on the phosphorus it contains; certainly there can be no doubt that some sorts of fish, such as soles, whiting, plaice, etc., are peculiarly suitable to a weak digestion. I may incidentally observe that I have found a fish diet especially serviceable for those predisposed to phthisis. A certain amount of rest and sleep, as well as a due supply of healthy blood, are absolutely necessary to maintain the brain in a working condition. Above all, the amount of mental work must be in proportion to the physical strength. I knew an instance of a gentleman who attempted to read ten hours a day, and whilst doing so his competitors got ahead of him; he then wisely reduced his time of work to eight hours. He then recovered his lost ground, and came out a wrangler. There are men of iron constitution who can afford to laugh at these precautions, and who can excel both in mental and bodily exercises. A friend of mine who went in for a public examination surpassed most of his contemporaries, who were his equals in mental capacity, by sheer power of physical endurance.

The Limits of Inhabitation.

An English physician, Dr. R. A. SMITH, long engaged in sanitary studies, has recently written as follows:—

"I know that the lowest classes, living in poisoned houses, die from other causes than bad air; but I am speaking of air at present, and that is one of the causes. The time must come—and the sooner the better—when it shall be enacted that no land shall contain more people per acre than we know by experience in several places can live healthily thereon. The same thing must be said regarding houses, although these are more difficult for governments to deal with, because of the degradation of some of the population. Still the limitation must be obtained, and for that we must strive."

On this passage, and some recommendations to destroy the houses in overcrowded localities, *The Nation* remarks:—

"We wish no man could be made a member of our common councils until he had passed a competitive examination on the passage following, and had beaten all his opponents in the zeal, at least, with which he declared his willingness to act according to his knowledge."

With every wish for the early improvement of common councilors and all other functionaries, we seriously doubt whether any limit can or ought to be assigned to the number of people who should live on a given area. We are inclined to believe that it is practically unlimited, if only sanitary rules be strictly enforced. The mere aggregation of human beings entails no disastrous consequences of necessity; but it is the neglect of hygienic precautions so apt to follow that leads such writers as Dr. SMITH astray. Were it necessary, abundant evidence could be advanced to show this, but it is too nearly self-evident.

The Frozen Well at Brandon, Vermont.

Several years since, in company with several professional gentlemen, we visited the remarkable well at Brandon, Vermont, a description of which we give below, copied from the *Scientific American*. This well does not seem to have received the attention at the hands of scientific men that it deserves.

"About a mile southeast of the village of Brandon, Vermont, there is situated a well 41 feet deep, the water of which has the remarkable peculiarity of remaining frozen all the year round. In 1859 the owner of the property began the usual excavations for water. After passing through 4 feet of clay and 10 feet of soil, a bed of frozen gravel, 16 feet in thickness, was encountered, which rapidly changed to mud when exposed to heat. Further digging penetrated another bed of clay, and finally a layer of clean gravel, in which water was found. As the winter months approached, ice began to form in the well at the rate of from 2 to 4 inches over night, while during the succeeding summer, though the well remained open, an occasional skim of ice would appear on the surface.

"Eventually the well was abandoned, but since it has remained unused, it is found that if the winter ice is not removed when the weather is quite warm, the water remains frozen through the hottest months. During April last ice 20 inches in thickness was taken out, but as the atmosphere at that time was chilly freezing again took place. On July 16 of this year the temperature in the shade was 85°; at two feet from the surface of the ice in the well the mercury sank to 32°.

"In 1860 four shafts were sunk in immediate proximity to the well without striking frozen ground; a fifth endeavor was

more successful, but the experiment was never completed, though we learn that it will be once more undertaken next summer. There is considerable speculation in scientific circles as to why this particular locality, possibly 200 feet square, should permit the winter cold to descend through from 12 to 29 feet of clay and gravel and freeze a mass of material averaging 14 feet thick, and yet not affect any other spot composed of similar strata. Professor Hager is of opinion that the phenomenon is due to glacial remains. The beds of clay, which intercept the sun's heat, and besides shed off surface water, together with the favorable arrangement of the strata in connection with its dip and the proximity of the outcropping limestone, it is believed, have protected the frozen mass from thawing for thousands of years, while the remainder of the glacier has long since melted away, leaving only its moraines in the neighborhood. Mr. Clarence Sterling, of Bridgeport, Conn., who has already spent some time in the investigation of the subject, proposes next year to carry down the fifth well to a greater distance."

The University Hospital.

Professor AGNEW, while in Europe, spent much of his time in visiting the various Hospitals in Vienna, London, and Paris, and has brought with him many valuable hints in relation to their construction and management, which will be of service in the establishment of the new University Hospital.

It is now confidently hoped that the generosity of the friends of this much-needed Institution will soon place the treasury in such condition that the work may be vigorously pressed to completion.

The value of this Hospital will be inestimable to the University, and every friend should feel interested in rendering it assistance.

The Presbyterian Hospital, New York.

On the 10th inst. the Presbyterian Hospital, located on Seventieth street, between Madison and Fourth avenues, New York, was opened with the customary ceremonies. The portions yet to be erected are wings, to be built on the Madison avenue and Fourth avenue sides. The materials used in the erection were Philadelphia brick and Lockport limestone. The building extends 200 feet from north to south, and 400 feet from east to west. When fully completed it will consist of three pavilions, and accommodate 300 patients.

The site of the building, which was valued at $250,000, was donated by Mr. Lennox, who also contributed $10,000. So far the building has cost $750,000, and it is expected to cost $1,000,000 when the wings are added.

A full description of this Hospital, with two full-page plates, was given in the REPORTER of March 4th, 1871.

Prize for an Essay on Galvanism.

The Academy of Sciences in Bologna has announced that a prize of 1200 *lire* ($240), the "Aldini Prize," will be awarded to the author of the best scientific experimental essay on galvanism or dynamic electricity. Essays intended for the competition must be sent in between July 1, 1872, and June 30, 1874, and must be written in Italian, Latin, or French. They must be either written or printed; but in the latter case, must not have been published previously to the two years above mentioned. Each essay is to bear a motto, and to be accompanied with an envelope stating the name of the author. They must be addressed to the Perpetual Secretary of the Academy of Sciences of the Bologna Institution.

The Action of the Cerebral Hemispheres.

At the late meeting of the French Association for the Advancement of Science, Dr. FLEURY compared the dynamism of the two cerebral hemispheres. Serre and Broca have for a long time pointed out the functional inequality of the two cerebral hemispheres, and a great number of clinical facts confirm their ideas. Gratiolet has observed the same inequality in the development of the brain in the fœtus. The left hemisphere excels the right. Dr. Fleury explains this functional inequality by the unequal distribution of blood in the cerebral hemispheres. Relying on the physical laws which regulate the course of the blood in the veins, and on the results of numerous measurements, he shows that the left hemisphere receives a more considerable quantity of blood than that which reaches the right hemisphere. The measurements taken of the jugular veins also confirm this opinion. Finally, we have to mention the agreement of a greater afflux of blood to the right superior limb.

The Chemist's Lament.

Our learned friend, Prof. John Ordronaux, has a poem with the above title in the *College Courant*. We have a mind to make a selection from it, and therefore give the

MORAL.

Oh how can we ever grow usefully wise,
Till we read Nature's laws through chemistry's eyes?
How show why all people for want of breath, die,
And turn, when inhumed, into onions or rye?
How else can we tell how a musical frog,
Is duly evolved from a dull pollywog;
Or unified lovers revealing one soul,
Two hemispheres joined by an opposite pole,
Which, being reversed, breaks the chemical force
Of conjugal union, by legal divorce?
How else can we show how our crimes spring from bile
Perverted, and blunting our conscience the while:
Or, if the child fathers the man anyhow,
Why, *ex hypothesi*, the calf must the cow?
These riddles our chemistry solves for all men,
By ringing the changes on H O C N.

Dr. John Ordronaux, we may add, is Professor of Medical Jurisprudence in the new school of law in Boston University. He graduated at Dartmouth College in 1850, at Harvard Law School in 1852, and received a medical diploma from Columbia University, Washington, D. C., in 1860.

What is Dirt.

Old Dr. Cooper, of South Carolina, used to say to his students: "Don't be afraid of dirt, young gentlemen. What is dirt? Why, nothing at all offensive, when chemically viewed. Rub a little alkali upon the dirty grease spot on your coat, and it undergoes a chemical change and becomes soap: now rub it with a little water and it disappears. It is neither grease, soap, water, nor dirt. That is not a very odorous pile of dirt you see yonder; well, scatter a little gypsum over it and it is no longer dirty. Everything like dirt is worthy our notice as students of chemistry. Analyze it; it will separate into very clean elements. Dirt makes corn, corn makes bread and meat, and that makes a very sweet young lady, that I saw one of you kissing last night. So after all, you were kissing dirt, particularly if she whitened her face with chalk or fuller's earth; though I may say that rubbing such stuff upon the beautiful skin of a young lady is a dirty practice. Pearl powder I think is made of bismuth, nothing but dirt. Lord Palmerston's fine definition of dirt is 'matter in the wrong place.' Put it in the right place and we cease to think of it as dirt.

The Rattle of the Rattlesnake.

At a meeting of the Essex Institute Mr. F. W. Putnam gave a description of the structure of the horny appendage to the tail of many snakes, especially developed in the genus of Rattlesnakes, and controverted the idea of natural selection having anything to do with its peculiar development. He also thought that the supposition that the rattle was a benefit to the snake, as a means of enticing birds, by its sound imitating that made by the Cicada, as suggested by a writer in a late number of the *American Naturalist*, could not be accepted. The Cicada was not a ground insect, and was comparatively rare, even among the trees, in such localities as were most frequented by the rattlesnake. Secondly, the sound made by the snake was very slight under ordinary circumstances, and the rattle was not sounded to any extent unless the snake was disturbed by some cause. His own observations on these snakes, in their natural habitat, led him to believe that it was not at all their nature to set up a rattling for the sake of enticing birds to them, but that they would slowly and cautiously approach their victim, or else lie in wait ready to give the fatal spring upon anything that came near. He believed that the rattle was in reality a detriment to the snake, except in so far as it served to call the sexes together, which, from the unsocial habits of the species, he thought was most likely its true function.

The Origin of Cancer Cells.

On this debatable topic Dr. Knoll remarks, in *Virchow's Archiv*, that it is well known that the cells of cancers, and more especially of the epithelioma, present the character of epithelial cells; and it has been of late a matter of considerable discussion whether, as Virchow long ago asserted, these epithelial cells may originate from connective tissue corpuscles, or whether, as many now hold, they only originate from some form of epithelium, glandular or other. In the present paper a case is detailed with a view to contributing to the solution of this question. The tumor was an epithelioma of the vocal cords, and from its examination the author concludes that here, at least, the epithelial cells of the cancer took origin in the gland-cells of the mucous glands, and only the stroma in the connective tissue of the glands. He is

not, however, inclined from this case to draw a general conclusion, and differs from such observers as Waldeyer, in admitting that the epithelial cells of cancer may arise in connective tissue, though probably they generally take origin in epithelial structures.

Analysis of the Empire Spring, Saratoga.

This celebrated spring has recently been subjected to a careful analysis, with the following results:

One United States gallon, of 231 cubic inches, contains:

Chloride of Sodium	506.630 grains,
Chloride of Potassium	4.292 "
Bicarbonate of Magnesia	42.953 "
Bicarbonate of Lime	109.656 "
Bicarbonate of Lithia	2.080 "
Bicarbonate of Soda	9.022 "
Bicarbonate of Baryta	0.070 "
Bicarbonate of Strontia	a trace.
Bicarbonate of Iron	0.793 "
Bromide of Sodium	0.266 "
Iodide of Sodium	0.006 "
Sulphate of Potassa	2.769 "
Phosphate of Soda	0.023 "
Silica	1.458 "
Alumina	0.418 "
Fluoride of Calcium, Biborate of Soda, Organic matter,	each a trace.
Total	680.436 grains.
Carbonic Acid Gas	244.669 cub. in.

Deaths from Chloroform.

The repeated accidents from the use of this anæsthetic are causing comment in even non-medical periodicals. The *Church Journal* remarks:—

It is true that the medical profession, after twenty or more years' use of a well-known drug, have no settled convictions in regard to the cause or prevention of these *accidents*, as they are called, no reliable guide for its administration, no intelligible theory of its poisonous action, and consequently no accepted theory of cure when danger comes.

Everybody knows the simple, deadly fact that, mysteriously, "chloroform may kill." Physicians know nothing more.

The fatal termination is regarded as providential, and at coroner's inquests the physician usually testifies that he politely remonstrated and advised against its use, thus adding a suicidal coloring.

The attempt to connect these cases with organic disease has failed in every instance. The unfortunates are exceptionally healthy, and yet physicians testify absurdly, "I do not administer in heart disease."

We call on the medical profession for an intelligible explanation of this phenomenon, for a valid rule which shall contra-indicate its use or permit it with safety.

We acknowledge the force of these remarks, and appreciate the extraordinary difficulty that surrounds the investigation. The more need for an early and thorough study of it.

Another Theory of Creation.

Theories of the origin of species are abundant just now. The latest is by Mr. B. G. FERRIS. He explains it thus:—

"My theory, in short, is, that at each step in the creation of species a prior living organism is used by the Creator as an ovum or matrix to produce a new species, without the aid of the ordinary *paternity* required in reproduction; and precisely in the same way, that the lowest animal was produced by creative influx into a matrix of crude earthy materials. Reproduction requires the coöperation of the animal sexes, while original creation does not."

This theory has the endorsement of the Boston Society of Natural History. To us it seems foolishness; and the arguments used by the author to support it are certainly untenable. He adopts, for instance, the obsolete view that "all beings are at one stage of embryotic progress female." This is totally erroneous.

The Union of Morphia and Chloroform.

A good deal has been written about the union of morphia-injections with chloroform-inhalations to produce prolonged insensibility to pain after important surgical operations. M. Demarquay concludes, from a short series of experiments, that it is a method liable to especial dangers, arising from lowering of the temperature.

On the other hand MM. Sabbé and Guyon have experimented on the effects of this mixture in surgical, or such operations as require the patient to be placed in an anæsthetic state, and express a belief that the effects of the mixture on the patient last longer and may be maintained by small doses of chloroform with less danger to the patient. The discovery of this effect is due to M. Claude Bernard.

The Influence of Laws of Succession on the Fertility of Marriage.

The French laws force a testator to divide a large part of his property equally among his legitimate children. Hence, says M. JANNET, a writer whose work is reviewed in *The Nation*, a large family is the dread penalty of the small husbandman, and hence comes that *sterilite systematique* constantly alluded to in this work. Physicians (for example, BERGERET,) have borne concurrent testimony with M. JANNET'S as to the direct connection between the laws of succession and the deliberate suppression of offspring, and consequent stationariness of the French population. Among those who protest most energetically against this feature of the civil code are the newly annexed Savoyards, accustomed to testamentary liberty, and who see their brethren across the Alps under a law (Italian Civil Code of 1866) which leaves one-half of a man's property at his absolute disposal, whatever the number of his children. Such was the liberty also of the people of Nice, who, under the old Sardinian constitution, could boast of a law, repealed only in 1848, which exempted all Sardinian subjects having twelve legitimate children from all public taxes and burdens, even to customs duties on goods and provisions necessary to the support of their families, during their entire lives. In all the departments under M. JANNET'S consideration, population is shown to be either stationary or retrograde; and as the *partage force* is carried to the greatest extent, for obvious reasons, in the most fertile districts, so systematic sterility and its attendant vices there flourish most.

Physicians will strive in vain against elected infertility in marriage, so long as laws of this kind are in vogue.

Indications for Counter-Irritation.

Dr. A. H. SMITH expresses his opinion, in the *New York Medical Journal*, that there are four conditions in which counter-irritation may act to relieve pain or abate inflammation:

1. When there is a direct vascular connection between the irritated surface and the diseased part. In this case, counter-irritation acts by opening a larger passage for the blood through the sound tissue, and thus diverting the circulation in part from that which is diseased. An example of this is afforded by the application of blisters to the neighborhood of inflamed joints.

2. When a large surface is exposed to the irritating agent, in which case the entire circulation of the body, including that of the diseased part, may be modified. An example of this may be found in the use of hot foot-baths, to relieve congestions of the thoracic or abdominal organs, or of hot applications to the chest and abdomen to relieve wakefulness.

3. When the irritation is transferred to a distance by reflex action, and there simulates the first condition. As an example of this, may be cited the employment of blisters to the breast, to act upon the lungs, there being no direct communication between the vessels of the skin and those of the diseased organs.

4. When pain is the result of a mechanical cause, which cause may be removed by exciting muscular action through the reflex function; as when, in flatulent colic, the muscular coat of the intestines is brought into action by irritation applied to the abdomen, and expulsion of the flatus results. Of course two or more of these conditions may co-exist, and probably in most cases such is actually the fact, and the result is thus rendered more or less complex.

Influence of the Colored Rays of Light on Respiration.

A singular observation has been made by Drs. SELMI and PIACENTINI. Placing animals under glasses of various colors, and examining the expired air by analytical methods, they discovered that, as in plants, so in animals, the colored rays of light perceptibly affect the separation of carbonic acid. Letting 100 represent the amount of this gas exhaled by a dog under colorless glass in a given time, under black glass the amount was reduced to 82, under violet to 88, under red to 92, under blue increased to 104, under green to 106, and under yellow to 127! A dove and a hen subjected to the same conditions showed still greater differences. These results are quite analogous with those observed in plants. Under green and yellow glasses they take up the largest quantities of carbonic acid, while animals subjected to the same conditions give off the same gas most rapidly. The experiments were carefully conducted, and may be found in the *Rendi conti del reale instituto Lombardo*, vol. 3, 1872.

Effect of Color on Health.

A correspondent of *The Builder* states that he had occasion to examine rooms occupied by young ladies for manufacturing purposes, and he has observed that while the workers in one room would be very cheerful and healthy, the occupants of a similar room, who were employed on the same kind of business, were all inclined to be melancholy, and complained of a pain in the forehead and eyes, and were often ill and unable to work. The only difference he could discover in the rooms was that the one occupied by the healthy workers was wholly whitewashed, and that occupied by the melancholy workers was colored with yellow ochre. As soon as the difference struck him he had the yellow ochre washed off the walls and then whitened. At once an improvement took place in the health and spirits of the occupants.

Carbolic Acid in Pruritus.

In prurigo and pruritus, says Dr. PINTSCHOVIUS, in the *Allgemeine Medicinische Central Zeitung*, I have successfully tried carbolic acid externally. I prescribe a solution containing 2½ per cent. of carbolic acid, and of this direct a tablespoonful to be mixed with a teacupful of rain-water. Every morning and evening the diseased skin is thoroughly sponged with this. I treated 30 patients in this way, and every one has recovered in from three to eight days' time.

News and Miscellany.

Hopkins' Hospital.

The old buildings of the Maryland Hospital, Baltimore, Md., are to be torn down shortly, to give place to a more imposing structure under the munificent endowment of Johns Hopkins, Esq., amounting to $2,000,000, to be known as the "Hopkins' Hospital," for the benefit of people of color.

Vital Statistics of Berlin.

Last year there died in Berlin 32,362 persons. Of these there were 188 suicides, 5 murders, 288 accidents, 49 of cholera, 5085 of small-pox, 12 of syphilis, 18 of delirium tremens, 1 of sunstroke, 1 of glanders, 1 of hydrophobia, 3 of trichinosis, and 102 in consequence of surgical operations (hemorrhage, pyemia, etc.) The average annual mortality is about 1 in 38. The annual births 1 in 27. About 3 children average to each marriage, and about 16 children in every 100 born are illegitimate.

The Empress Carlotta.

The *Lancet* remarks: "According to a letter (seemingly well-inspired) in the *XIX Siècle*, the Empress Carlotta maintains her physical health, not only unimpaired, but to some extent improved, while her mental derangement has reached the last stage of imbecility. She lives estranged from all her family, resolutely declining to see either the King or Queen, who are forced to content themselves with catching a glimpse of her during her occasional walks in the grounds of the Château Tervuerer. Her physicians have abandoned all hope of her restoration to sanity, while they augur favorably of her general health. Her mind still dotes on her lost empire, and all her caprices, and they are many, run in the direction of imperial state pageant. She constantly despatches telegrams to Napoleon III; who, she believes, still reigns; and, saddest of all, the name of Maximilian is seldom off her lips."

Francis Lieber.

Doctor Francis Lieber, the distinguished German author and publicist, died suddenly in New York on the 2d of October. He was born in Berlin, in the year 1800, and at an early age entered the Prussian army, taking part in the campaigns that culminated in the fall of Napoleon I. In 1827 he took up his residence in this country, living first at Boston. In 1835, he was appointed Professer of History and Political Economy in the South Carolina College, at Columbia, which position he held until he accepted, in 1858, a similar professorship in Columbia College, New York. Professor Lieber, though advanced in years, was at the time of his death a powerful and eloquent writer, his latest works being striking essays on the subject of prison management and punishment.

Too Much Medicine.

The New Bedford (Mass.) *Mercury* says the medicine-chest of one of the abandoned Arctic whalers was broken open by some of the natives, who, thinking they had found a prize, proceeded to swallow the contents of all the bottles. The survivors described the result as startling, for the doses were too large for the constitution of even an Esquimaux. Several of the partakers died, and others wanted to, but couldn't.

Scientific Garroters.

Dr. F. Kirkpatrick, Vice President of the Royal College of Surgeons, Ireland, while proceeding to visit a patient at ten o'clock at night, recently, was garroted in one of the most fashionable streets in Dublin, and deprived of his watch and chain. One of a gang of three men quickly rendered Dr. Kirkpatrick insensible by pressing firmly on the carotid arteries on both sides.

German Hospital, Philadelphia.

The buildings at Twentieth and Norris streets, in this city, belonging to the German Hospital, having been found to be unfit for the purposes for which they are used, it became necessary to secure other accommodations. A committee was appointed to procure a site, and the large mansion and piece of ground at the southwest corner of Girard and Corinthian Avenues, opposite the gate of Girard College, was purchased. The price paid was $35,000. The new premises were occupied on the first inst. The building will be immediately fitted up for the reception of the patients from the old building before the winter weather sets in.

Poisoned by a Spider's Bite.

One of those unusual cases, death from a spider's bite, is reported from Chelsea, Mass. A livery man, while riding with his wife recently, wearing a coat which had been hanging in his stable, remarked that he had been bitten by something, and on reaching home the author of the mischief was discovered in a poison-fanged spider which had crept into his coat. The wound commenced to swell in spite of medical aid, and resulted fatally.

THERE are at this time four chemical laboratories in Japan where the science is taught, three of them being presided over by Germans, and the fourth by an American. The chief one is at Osaka, where there are nearly 100 students. The rest are at Kaga, Schidzoouka and Fukuwi. A fifth will soon be open at Jeddo. The students are said to be fairly intelligent. but their minds are at present incumbered with astrology and other kinds of spurious philosophy.

THE Elizabeth, N. J., *Journal* says that a certain undertaker there sent to one of the prominent physicians of that place a lot of death certificates with his card on them, as a complimentary present to the doctor. What the doctor sent to the undertaker as an acknowledgment of the compliment we have not heard.

THE trustees of Franklin College, at New Athens, Ohio, have conferred the degree of LL. D. on Dr. Samuel G. Armor, of the Long Island Medical College Hospital, of Brooklyn.

NOTES AND QUERIES.

Dr. J. G., of Illinois.—The prescription entitled "A New Combination," published in THE REPORTER of September 7th, should read "Pulv. caryophyl," instead of "carophyl." A letter was dropped by mistake.

Dr. W. F. Major, Hamilton, Ohio, has a complete set of BRAITHWAITE'S RETROSPECT, bound in leather, for sale.

MARRIAGES.

BAILEY—BATTELLE.—October 10th, 1872, at Trinity Church, Hoboken, N. J., by Rev. R. W. Howes, Matthew A. Bailey, M.D., and Agnes S., daughter of Charles B. Battelle, of New York City.

BLAKESLEE—DAWSON.—By Rev. John Gilmore, August 31st, at the house of the bride's mother, Andrew, Pa., A. W. Blakeslee, M.D., of Mercer, Pa., and Miss Maggie A. Dawson.

CASKEY—LITTLE.—October 9th, 1872, at the residence of the bride's parents, Brooklyn, N. Y., by Rev. Wm. T. Enyard, Floyd Winslow Caskey, of Middletown, N. Y., and Sarah Eva, oldest daughter of George S. Little, M.D.

DUNNING—BALDERSTON.—In Philadelphia, on the 8th inst., at Green Street M. E. Church, by Dr. C. Cooke, minister, assisted by Mr. Langley, pastor, Thomas S. Dunning, M.D., of Middletown, Del., and Lydia, daughter of S. F. Balderston, of this city.

GRISWOLD—HUGHES.—October 5th, by the Rev. H. M. Walker, Dr. E. M. Griswold, of Houston, Texas, and Miss Martha E. Hughes, of Evening Shade, Hamilton County, Ohio.

HANLY—WAY.—In Philadelphia, October 10th, by the Rev. Thomas A. Jaggar, Mr. Abott Hanly, M.D., and Amanda A., daughter of J. Tunis Way.

KING—FISHER.—October 1st, 1872, at Devon, Bucks County, Pa., by the Rev. Frederick W. Beasley, D.D., Dr. Charles R. King, of Andalusia, Bucks County, Pa., and Nancy W., daughter of the late William W. Fisher, of Philada.

MACAW—MORGAN.—At the residence of the bride's father, by special license, on the 26th ult., by the Rev. H. B. Wilson, assisted by the Rev J. K. Leslie and Rev. James Boyle, James Macaw, Esq., M.D., of Bushmills, and Matilda, second daughter of William Morgan, Esq., of Cookstown, County Tyrone, Ireland.

MARSHALL—WALLACE.—At the residence of R. R. Stevens, Glendale, Ohio, October 1st, by the Rev. Chas. Young, Dr. J. L. Marshall, of Fort Dodge, Iowa, and Miss Luella Wallace.

PORTER—LYON.—At Orange, N. J., October 8th, by Rev. Anthony Schuyler, D.D., Edward E. Porter, M.D., of New York, and Miss Mary F. Lyon, of Utica.

RICHTER—ROBBINS.—At Germantown, Pa., October 2d, at the residence of the bride's father, by Rev. James De W. Perry, Dr. H.W. Richter, of Brooklyn, N. Y., and Lizzie, daughter of Jeremiah Robbins.

TICE—PROUDFIT.—At Sterling Valley, N. Y., October 2d, by Rev. Amos C. Beach, D.D., Rector of Christ Church, Oswego, Lewis Tice, M.D., of New York, and Miss H. Elizabeth Proudfit, daughter of the late Alexander Proudfit, M.D., of Sterling Valley.

TOWNSEND—HOLLINGSWORTH.—In Philadelphia, October 10th, by the Right Rev. Alfred Lee, D.D., Protestant Episcopal Bishop of Delaware, assisted by the Rev. Dr. Benjamin Watson, Ralph Milbourne Townsend, M. D., and Ida, daughter of the late Elijah Hollingsworth, of Wilmington, Del.

DEATHS

JUDGE.—In Cincinnati, on the 5th inst., of congestion of the lungs, Mary Cornelia, wife of Dr. J. F. Judge, and oldest daughter of the late Rev. George Rogers.

KEASBY.—August 4th, at Lake Mohonk, Ulster County, N. Y., Mary P., wife of the late Dr. Keasby, of Salem, N. J.

RICHARDSON.—In Brooklyn, N. Y., October 3d, Susan P., wife of Edward T. Richardson, M.D.

WARE.—At Niagara Falls, N. Y., September 21st, of inflammation of the bowels, Charles S. Ware, M.D., aged 48.

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Communications.

THE HISTORY AND THERAPEUTIC USE OF THE TURKISH BATH.

R. E. Van Gieson, M.D.
Brooklyn, N. Y.

The purification of the body, either as a means of health or as a religious ceremonial, is coeval with man's descent into an estate of sin and the attendant curse of sickness, misery, and pain. One of the earliest signs or symbols of purity is water; the human integument is the surface collector of impurity, while at the same time it is the great natural sewer of the body.

The application of the symbol gives purity, and with external purity there has always been connected, more or less vaguely, the idea of internal or subjective cleanness. We might naturally, then, expect to find, through all history, that golden thread of humanity, a striving after purity, more or less conspicuous.

As far back as Baalbec we can find traces of the bath. The ruins of this once magnificent city give manifest evidence of edifices devoted to surface cleansing of the body. Arriving at Greece and Rome the evidence becomes most perfect. In all the Roman ruins we find, even to-day, the remains of the bath. Nothing was too costly, no taste was too severe, no gold too precious, to expend upon those temples founded for the health of the people. At the time of Cæsar and Sallust Rome possessed 970 thermæ. Ten years after the birth of Christ Agrippa erected a series of baths on an enormous scale, with one exception the most famous of those times. Their dimensions, exclusive of enclosure, were 206 meters wide by 100 meters deep. In the year 64 the thermæ of Nero were erected; afterwards very much improved by Cæsar Alexander, by the addition of fountains and groves; a few years afterward Vespasian carried out the idea of combining the gymnasium with the bath.

After the erection of the thermæ of Domitian, A.D. 90; Trajan, A.D. 110; Hadrian, A.D. 120; Commodus, A.D. 188, followed the imposing thermæ of the Emperor Antonius Caracalla, A.D. 217, whose astounding ruins still excite the wonder of the modern tourist as he approaches the Aventine hill. Looking at these surprising remains one almost imagines the ruins of a whole city lying before him. In its original state they comprised a huge parallelogram of 300,000 cubic meters, of which nearly 124,000 cubic meters still remain. So rich in baths was Rome that hundreds could bathe at one time, and in the course of the day many thousands could enjoy that luxury. Groves, fountains, marble statues, ornaments of gold and silver, frescoed walls, mosaic floors adorned the baths of a Nero and a Vespasian. The Laocoon group, the pearl of ancient statuary, was the central ornament of the thermæ of the conquering Titus.

Rome's poorest slave, the scavenger of the street, in those days had his right to the bath; the luxury of cleanliness, a privilege, to our shame be it said, practically only to be enjoyed by those in affluent or moderate circumstances. With us dirt and poverty have grown, by the laws of association, to be synonymous terms. Not so with the meanest

inhabitant of the Eternal City. The great axiom "*In balneis salus*" was the secret of the power of the once mighty Latin race, and until the bath degenerated the Romans held their supremacy.

Phidias and Praxiteles placed their masterpieces in the bath of Diocletian, in the erection of which some 40,000 Christians were compelled to serve as laborers.

But time works wonders, and Christianity seems to have avenged herself. Over the once stately halls of the thermæ glitters the cross of St. Peter; a part of the bath of Diocletian forms the nave of one of modern Rome's most famous Churches. There, in those halls consecrated to Apollo and Hygiea, where poets recited their verses, where philosophers held dispute over the Platonic Logos, where the youth engaged in manly sports, where all was joy, laughter, and song, now resounds solemnly, from the lips of Carthusian monks, the mournful "*memento mori.*"

Though the Romans brought their thermæ to a high state of perfection, they derived the idea of the bath, especially that part of it relating to its curative powers, from the Greeks. Hellenic colonies in southern Italy gave the master patterns for the great bathing halls of the Romans, and until this time the descendants of the founders of the Eternal City were content to lave their weary limbs in the muddy waves of the Tiber.

When the Romans conquered the Byzantine Empire they took with them their habits of bathing. The Turks, after gaining Constantinople, adopted with pleasure this one commendable habit of their predecessors, and from that day to this the Roman bath as modified by the Turks has suffered but little change.

To the Turks, then, belongs only the credit of conservation, and we might add, purification. The bath of the Turks to-day differs but little from what it was centuries ago. The modern traveler, from Volney to Mark Twain, has described and re-described it. Volney rushed from it in horror and dismay; Mark Twain seems to regard it as a stupendous fraud; between the praise, ridicule, abuse, and caricature of different writers it has been difficult to get a precise idea as to its merits or demerits. The first really correct and scientific description of the Turkish bath prominently brought to the notice of the medical profession is that of Mr. Urquhart, the founder of the first bath in Great Britain, from whom I condense, in moderate space, the very lengthy description given in his manual.

To have a clear idea of the nature of the process we must divest our minds of our preconceived notions of what we call bathing, viz., the application of water and soap to the body. We can bathe as well in air as in water. The bath of the Turks is essentially the application of *hot air*. There are three essential apartments in which are performed the four operations of the bath. The operations consist, 1st. Of the seasoning of the body. 2d. The manipulation of the muscles. 3d. The peeling of the epidermis. 4th. The soaping. The apartments are, the great hall, or *mustaby*, open to the outer air, the middle chamber, where the heat is moderate, the inner hall, which is properly the thermæ. The time occupied is two hours; the operation is repeated once a week. This constitutes the Turkish bath of to-day; it is not identical with the bath of the Romans, but the similarity is such that there can be no doubt as to its origin. The *Apodyterium* is now the *Mustaby* or entrance hall. The *Lepidarium* and *Sudatorium* are now the two inner chambers, differing only in the degree of heat. The essential operations, removal of the epidermis and shampooing, remain nearly the same. The Romans had distinct attendants for these two operations, the first called the *Tractator*, the others, who used the *Strigil*, which was equivalent to the glove, being called *Suppetones*.

The Romans used no soap, the Turks use it after the shampooing is concluded. The alteration from the heated room to cold water used by the Romans is compensated for by the Turks with the cold *air* of the outer room and the partial use of cold water to the feet.

The hot water reservoirs, the *Labrum* and the *Solium* are still preserved in some of the private baths and in those of the Alhambra. In the shaving of the hair, the practice of the Turks is precisely similar to that of the Romans. The *Piscinium* of the Romans is still found in the Moorish gardens. The *Olearea* are alone wanting to complete the parallel. The smearing of the body with oil would be regarded by the Turks as a defilement. The Romans entered the bath naked, the Turks have invented an appropriate costume. The Romans allowed the sexes to enter promiscuously, the

Turks have wholly separated them. They have rejected much in it that was evil and preserved all that was good.

The great hall or Mustaby is circular, square, or octagonal, covered with a dome in the centre. In the middle of the hall stands a basin with a fountain playing in the centre. It is here that you undress and put on the bathing costume, consisting of three towels which cover the loins and shoulders. Thus attired and accompanied by the two attendants you enter the next room; small and dim, the temperature is moderate, the moisture slight. Here a gentle flow of perspiration is promoted, and while the moisture gently exudes, you can, if you like, drink a cup of coffee and puff a nargille, reclining meanwhile upon a cushion; after a moderate perspiration you enter the inner chamber, a space such as the centre of the dome of a Cathedral, filled with gauzy, mottled vapor, penetrated by various tinted rays streaming through the stars of stained glass in the vault. The water splashes, the brazen bowls clank, the inmates, naked save the scarf around the loins, are seen passing to and fro through the mist, or stretched out upon slabs exhibiting the wildest contortions, or bending over one another appearing to inflict and endure torture; a stranger might be in doubt whether he beheld a foundry, or a Tartarus, or some secret vault of the Inquisition. Under the dome is a platform of marble slabs; here you lie with a spread towel for your couch, a rolled towel for your pillow, to undergo the shampooing.

The Tellack kneels at your side, and bending over gripes and presses your chest, arms, and legs, passing rapidly from part to part, and then brings his whole weight upon you with a jerk. This is followed by rubbing and pressing of the muscles, bending of the joints, until every bone and muscle is manipulated. You are now seated on a board near two basins with hot and cold water. The Tellack puts on a glove of camel's hair, and standing over you, with long sweeps of the hand down the back, he peels off the skin right and left until it falls from the body like rolls of maccaroni.

Now comes the soaping. A large wooden bowl is brought, containing a lump of soap, with a sort of powder puff of *liff* or palm-nut, for lathering. Beginning with the head, the body is copiously soaped and washed twice, and part of the contents of the bowl is left for you to complete the operation, after which a bowl of hot water is dashed over the body, dry cloths are wrapped over the shoulders and loins, and you enter the middle chamber, the feet protected from the heated floor by wooden shoes. Here the cloths are again changed, and you are led to the outer hall, where you recline upon a couch, somewhat in the form of the letter W. As you rest upon it every muscle is relaxed; there is total inaction, hence true repose. Here you can have your coffee and pipe, sherbet and fruit, or, if inclined to something more substantial, you may indulge in kebobs on a skewer. One is apt to feel hungry at this stage of the bath, and a moderate meal is rather beneficial. While thus employed a boy drives cool air upon you to prevent the return of perspiration. The Turks have given up the cold immersion of the Romans, and substituted cool air, with applications of cold water to the feet. The nails of the hands and feet are now pared, callosities are rubbed down, the cloths again changed, and you feel that your body is renewed. The spirit wanders abroad, and, reviewing its tenement, rejoices to find it *clean* and tranquil. You are lifted, as it were, out of the flesh, and yet there is a sense of life and consciousness spreading through every member. The mind condenses the pleasures of many scenes, and, in delicious review, you enjoy in an hour the existence of years. But "this, too, will pass." The visions fade, the speed of the blood quickens, the breathing from the pores is checked, the crispness of the skin returns, the fountains of strength are opened. You seek again the world and its toils with renewed energy, and face its troubles with firmer determination. Paying your pence according to the tariff of your deserts, you walk forth a king.

It is a little strange that this delightful method of bathing should so long have been the sole property of the Turks. Although for many years familiar to thousands of continental travelers, no one seemed to have caught the idea of transplanting it to the West until a comparatively recent date. The zeal and energy of Mr. David Urquhart, a man of refined taste, excellent culture, a keen observer, and, withal, possessed of strong faith, amounting almost to fanaticism, in the virtues of the bath, finally overcame all obstacles, and established the bath on a sure footing in Great Britain in the year 1856. For nearly twenty years he had been laboring to get some one to carry out

the system of baths which was at once a work of civilization and enlightenment among the Eastern nations, but no man of eminence in society, qualified to give force to the enterprise, could be found to adopt his views, until the attention of Dr. Barter, proprietor of a large Hydropathic Institute, at St. Ann's Hill, Ireland, was arrested by an essay of Mr. Urquhart's on the subject. Convinced of the soundness of Mr. Urquhart's views, he invited him to try the experiment of building a bath. He placed land, workmen, and materials at his disposal, and soon the first modern British therma was erected.

The pioneer of the Turkish bath movement in America is Dr. Chas. Sheppard, whose attention was first directed to its virtues in 1859. Before attempting the experiment of founding the bath in America, he traveled extensively in the East, studied it in all its details, and, after a ripened experience, first established the bath on Brooklyn Heights in 1863. As long as men delight in health and cleanliness, the names of Urquhart, Barter, and Sheppard will be held in grateful remembrance.

The bath, in removing from the Orient, has suffered but little change in its essential details. What makes the bath precious to the Oriental is the dreamy tranquillity, the "*dolce far niente*," the coffee, the pipe, the lazy lounging. All this is quite foreign to the busy mind of the average Englishman or American, and in most baths no provision is made for drinking or smoking. Only the luxury of *repose* and *cleanliness* is sought for, and this is secured in full measure. Another improvement is the exclusion of *visible* steam from the hot chamber; the manipulations, also, of the shampooer are less violent, and applied with more judgment. The cooling of the body is effected in one of two ways, either by a spray which gradually decreases in temperature, or by a plunge into a pool of moderately cool water, or by a combination of both spray and plunge.

Having now a clear idea of the agent used, we are prepared to consider its therapeutic action. In the administration of remedies we are guided by their known effects upon the healthy subject. This is by no means a trustworthy source of information. The action of aconite or veratrum upon the healthy subject is to reduce cardiac force, and from such experience their value in inflammatory affections might be predicated. But no amount of experimenting with quinine upon the healthy body would ever lead one to suppose that it would cut short an intermittent. We can construct a theory after the fact, but we could not predict it.

The same is true, to a certain extent, with the Turkish bath. We might say, in a single word, that it is essentially a depurative, and that in a very large class of diseases requiring eliminating and depurative treatment, it would prove an efficient therapeutic measure. This is true. But the bath is also a *tonic* and *anti-periodic*, and just how a depurative can act as a tonic and anti-periodic does not at once become apparent. Reasoning before the fact, we would predict the reverse. We would say sweating is an exhausting process, ergo, it must leave one weak, especially when sweating is induced by artificial means. The assumption in both cases is doubtful. Perspiration, in a certain class of diseases, is a *symptom* of weakness, but whether a cause of such weakness, is also doubtful. The idea that free perspiration, artificially produced, is productive of physical exhaustion, is more common in the profession than out of it. There are many occupations, such as enameling, requiring the exposure of the body to 150° to 200° Fahrenheit. The men employed at such work do not suffer in health; on the contrary, they are remarkably free from bodily ailments. In hot, DRY air, the skin is naturally stimulated, and perspiration restores the balance between the heat of the body and the heated medium. The result, to speak in general terms, is a washing of the blood globules. So long as fluid is supplied internally, no injury can result. We feel lassitude and languor, not when we perspire, but when we *do not*. Take a *clear* day, with the temperature at 80° to 85°, we do not, as we say, *feel* the heat; we perspire freely, sleep comfortably, and begin the next day's work with a fair share of vigor.

The same temperature, with a damp, cloudy atmosphere, makes the body uncomfortably warm, depresses the mind, gives us a feeling of lassitude and exhaustion quite out of proportion to the degree of heat marked by the thermometer; we do *not* perspire, and life is burdensome. Look at the shampooers employed at the bath. They are on duty for eight hours at a time, at a temperature ranging from 90° to 120°, and wind up the day's work by taking a bath and shampooing each other. They are healthy to a re-

markable degree, and are not desirous of a change of occupation. Whatever our professional ideas may be concerning the effects of prolonged sweating, induced by dry, heated air, we must accept the above facts. I am often asked by medical men, "Do you not consider such a violent change from the ordinary temperature to one of 150°, and the consequent diaphoresis, somewhat dangerous?" My only answer is the above facts, my own experience, and the admission that I once held similar views. I have dwelt longer on this point than seems necessary, because physicians are a little timid in recommending the bath to their patients, for fear that they may be debilitated by the sweating stage. In my own practice, with a somewhat extensive trial, such a result has never occurred; on the contrary, it has had, in the majority of cases, a decidedly tonic effect.

The tonic effect of the bath does not, of course, result alone from the *sudorification*, but from the *harmonious action of the three stages*—the sweating, the shampooing, and the final cooling. The combined impetus of the shampooing and the heat stimulates powerfully the nervous, vascular, and absorbent systems. To supply the waste of fluid eliminated by the skin, the cutaneous system of blood-vessels draw upon the internal trunks, thoracic, abdominal, and cerebral. The exalted condition of the circulating, nervous, and glandular systems, induced by heat and friction, augments the vital force, restores the balance in obstructive disorders, promotes secretion and absorption. When each muscle, nerve, and blood-vessel, thus stimulated, properly performs its function, the result is *tone* or vigor.

The action of the bath as a tonic and antiperiodic is very strikingly shown in the treatment of long-standing cases of malarial fever. In two very obstinate cases, in which the paroxysms were only kept at bay by the salts of quinia and iron, the bath operated wonderfully in aiding the cure. In these cases the baths must be given frequently—once or twice a day—until the paroxysms are arrested. It is in cases of long standing that the most benefit will be received. I am inclined to the opinion that the bath also acts as a prophylactic, at least persons who bathe twice a week are very little liable to suffer from the effects of living in a malarious district.

The tonic effect of the bath is also shown in cases of indigestion, chiefly those arising from an excess of mental work. Pepsine will help such cases; the bath and pepsine will cure. The advantage of the bath in nervous dyspepsia lies, not only in its tonic virtue, but also in its sedative effects upon the nerves.

The Turk resorts to the bath not only in health, as a means of cleanliness, but also when overburdened with sorrow. To the wretched dyspeptic, imagining himself the victim of an incurable disorder, subject to deep fits of melancholy, I know of no better and more complete sedative than the bath. The tranquilizing effect upon the irritable nerves, if it serve no better purpose, will, for a time, at least, make him oblivious to his misery; and the final bracing effect will inspire him with determination to overcome the cause of his troubles.

The very curious train of nervous troubles arising from over-indulgence in tobacco are very promptly relieved by the bath and a cessation of the habit. A very intelligent gentleman, unfortunately a reader of pseudo-medical works, and an inveterate smoker, had haunted my office for months with various disorders. His first complaint was heart disease. Examination revealed tumultuous action, intermittence, everything, in fact, but a murmur; this was cured by cutting down his allowance of tobacco. Next he came with an aneurism of the abdominal aorta, and, sure enough, on examining the abdomen there was a pretty distinct pulsation of the epigastric artery; after ridding him of his aneurism he came in about a week with cancer of the liver. He could feel a lump, and knew it was a cancer. About how long could he live? would like to make some provision for his family. It took me some weeks to convince him that his cancer existed only in his imagination, and for a month or two all went well, that is, just as long as he reduced his supply of tobacco. As a final resort he was advised to try the bath; since this time I have not seen him professionally, nor has any one else. He still smokes "just a little," and were it not for this I would not hesitate in pronouncing him out of danger; unfortunately, "just a little" means anywhere from three to a half dozen cigars daily. It is with some smokers as it is with some drinkers, their only safety is in "total abstinence." I am inclined to believe from observation of two cases only, that the bath

will *diminish* the desire for stimulus and tobacco. The testimony of others with opportunities for more extended observation in such cases, is strong enough to warrant its use as a part of the treatment in the reformation of inebriates.

There are many other ailments depending upon want of tone, where the bath, either alone or in connection with other treatment, will be found efficacious, but the main element of greatest usefulness lies in its *eliminating* and *depurative* qualities. For ages physicians have addressed remedies to the stomach for the purpose of final elimination through the skin. This method is circuitous, indirect, and frequently fails to accomplish the desired result; in the bath we have an agent which acts at once, directly, and with great energy upon the surface itself. In estimating the eliminating and depurative power of the bath, we must recall to our minds the varied secretions which find their final outlet through the surface of the skin.

Taken in the order of quantity we find

Water, carbonic acid, analogy to the lungs.

Chloride of sodium, urea, analogy to the kidneys.

Fatty matter.

Traces of alkaline salts.

Volatile acid.

Almost everything removed by the lungs and kidneys we find represented in the secretion of the skin, except phosphates, sulphates, and coloring matter.

The lungs discharge in 24 hours 15 ounces of volatile matter; the skin discharges 30 ounces. Considering the bulk of the sweat glands to be at least two-thirds that of the kidneys, the quantitive importance of the solids excreted by the skin becomes apparent. We can readily perceive what a wide field is opened up by the consideration of the possible *vicarious* offices that the skin may be made to perform.

When the bath was first introduced in England, the most extravagant predictions were indulged in, and to read the accounts published in the medical journals of that time, one would almost suppose that the universal remedy had been discovered. After some fifteen years of trial we now know to what diseases this method of eliminating treatment may be applied with a reasonable hope of success. Foremost in the list stands Bright's disease of the kidneys. A judicious use of the bath robs this dreaded disease of half its terrors. The danger of uræmic poisoning is placed at the remotest possible limit, and the instances in which life has been comfortably, nay, *enjoyably* prolonged can be counted by hundreds. I have patients now performing their business duties with regularity by the use of three baths a week; a failure to take the bath is invariably followed by a feeling of dullness, lassitude, and general *malaise*, which quite incapacitates them for any exertion. Cases complicated with serious involvement of the heart are improper subjects for the bath; heart disease not serious enough to affect the general health, is no barrier to its careful use.

It is, of course, to be understood that the bath in these cases is not the *sole* treatment. The patient is to be taught the importance of the most strict observance of certain hygienic rules, in diet, clothing, and general habits of life, all having in view the prevention of further encroachment of the process of degeneration upon the kidneys. These cases require the careful supervision of the medical attendant. The patients find themselves so much better after beginning the bath, that exulting in their new-found strength, they are apt to imagine themselves cured, and relax that vigilance in their habits of life which is so necessary to their continued welfare. Internal treatment in the majority of cases must be continued. Bath or no bath, we cannot well dispense with *iron*, either alone or in combination with judiciously selected saline remedies, but were I compelled to use but a single remedy, to the exclusion of all others, that remedy would most certainly be the bath.

Next in the list stands rheumatism, especially the chronic form, not complicated with immobility of the joints. The *barometer* variety, which knows of the east wind a day before "old probabilities," is almost certain to be alleviated, if not cured, by a *persistent* use of the bath.

Intermediate varieties, characterized by semi-acute attacks, or wandering pains, also the specific variety, are very much benefitted.

Next in the list stands incipient catarrh, the beginning of an ordinary cold; the bath taken at the right time will cut it short, or very much alleviate it when too far advanced to abort.

A single word about "taking cold" after the bath: go out with the skin DRY and there is no danger. *Hurry* the bath to catch a boat or car, leaving with the skin in a perspiring condition, sitting down afterwards and getting chilled, and the chances of taking cold are excellent. I have taken many baths; I never took cold but once, and that was when I carried out the latter conditions almost to the letter. Finally, to the class of diseases called chronic, especially those residing in the skin, or those not affecting the heart or lungs, whose pathological condition is undefined, and in which ordinary treatment seems to do but little good, the bath offers a chance of alleviation, perhaps permanent benefit. In conclusion, we would remark to those who consider themselves healthy, especially to physicians, the bath is a luxury and a means of repose after hard work, which cannot be over-estimated. There is a completeness in the rest of the bath not found in ordinary sleep. The sedative effect is profound, yet agreeable. I have gone to the bath when worn out with watching and anxiety, every nerve strung to its highest tension; I have come from it calm and confident after an hour of sleep.

There is no profession more able to appreciate the absolute luxury of rest than the medical. After a thirty-six hours' watching and waiting with a bad case of obstetrics, perhaps with all your efforts resulting in death; after a prolonged vigil with a critical case of fever; after one of many professional duties that breaks the rest and depresses the spirits, seek the repose of the bath. Its tranquilizing influence soothes the mind, smooths the asperities of medical life; its minutes of sleep count almost for hours; you awake not weary nor fretted by troubled dreams, but refreshed, renewed, confident, hopeful, and ready again to encounter the trials of your calling.

AN INTERESTING CASE IN PRACTICE. SCARLATINA; URÆMIC CONVULSIONS AND COMA, WITH RECOVERY.

By J. B. MATTISON, M. D.,
Of Chester, N. J.

I was called on the evening of August 18, to visit, in consultation, A. B., æt 17, and learned from the attending physician the following history of the case.

July 13th, patient was taken ill with scarlatina, which ran a mild course, presenting nothing particularly noticeable save an imperfectly developed eruption. Tuesday, 29th, having so far convalesced as to sit up, febrile movement set in, followed by œdema of the face and extremities. This state of affairs persisted for several days, when the pyrexia subsided, and the anasarca diminished, though it did not entirely disappear.

Friday, August 9th, patient began to complain of severe pain in the head, followed by frequently repeated vomiting, which continued till the 13th, the stomach being so irritable as to reject almost everything, even the blandest articles. This was accompanied with marked diminution in the renal function, no fluid escaping from the morning of the 9th till the afternoon of the 11th, when eight ounces of very bloody urine were removed with a catheter. The urine remained bloody, and was secreted in diminished amount for several days, when it improved in color and quantity, and the œdema, which increased during the acute trouble, again, in a measure, disappeared. On the evening of the 16th, patient having so far recovered as to admit of his passing several hours out of bed that day, was seized with intense pain in the head, which gradually increased in severity until 11 P. M. of the 17th, when it eventuated in a well marked convulsive seizure.

From this time till 1 P. M. the next day he experienced *thirteen* convulsions, all of them severe, the first about one minute in length, after which they increased in duration, so that the final one was prolonged for several minutes. The interval between them, for several attacks, was about an hour, during which the patient was entirely unconscious. They then occurred every twenty minutes or half hour, until the one preceding the last, which was followed by two or three hours of quiet. During the convulsions the face was intensely congested; the tongue, black and swollen, protruding from the mouth, was caught between the teeth and bitten severely, constituting a source of much discomfort for days after consciousness had returned, and the bloody foam escaping from the lips gave to the patient an aspect truly hideous.

On my arrival I found the young man in a semi-comatose condition; pupils widely dilated; respiration irregular; skin hot and dry; pulse 110; temperature 102. The renal secretion was much diminished, but little urine having passed for forty-eight hours,

and, although the catheter was employed that morning, only a few ounces were obtained. At this time, and for two or three days previous, patient was taking spts. eth. nit., ʒss doses, every two hours, gum and ice-water being given at irregular intervals. No effort had been made to check the convulsions, save a warm bath just previous to the second one, but as the fit came on while in the bath its further employment was abandoned.

We recommended the use of baths, at a temperature of 106°, every four hours, the patient after each bath to be wrapped in a sheet, and this covered with thick woolen blankets, with the double object of exciting the action of the skin and kidneys; the diuretic to be continued in the same dose, with the addition of tinct, fer. chlor., gtt. xx, every two hours; the bowels to be kept soluble by enemas, and liquid nourishment freely administered.

19th, 9 A. M. Patient still unconscious. Pulse 120, temperature 102. No action of the bladder since previous visit. Catheter introduced, and eight ounces of very bloody fluid abstracted. Urine examined and found *loaded with albumen*. Treatment continued.

20th, 9 A. M. Patient much improved; entirely conscious. Pulse 96, temperature 98. Learned from an intelligent nurse who remained during the night, that about 10 o'clock, after being very restless for nearly an hour, the patient suddenly voided an *immense* quantity of urine, saturating his body-linen, and soaking through the sheet deep into the mattress beneath. His attendant was astonished, and assured me it was not less than a quart. From that time till the occasion of my visit he had several evacuations from the bladder; the skin, which seemed to resist the action of the bath at the outset, became soft and moist, and consciousness gradually returned. An examination of the urine this morning showed a decided decrease in the amount of blood and albumen, and the case seemed to be progressing fully as favorably as could be expected. Treatment continued; the diuretic effect of the previous mixture being increased by the addition of acetate of potash after the following formula:

℞ Potass. acetat, ʒss.
Spts. eth. nit., ʒss.
Tinct. fer. chlor., ʒij.
Aq. ad ʒiv. M.
S. Tablespoonful, in water, every 4 hours.

Patient encouraged to partake freely of liquids.

21st. Doing well; pulse 88; temperature 98; skin and kidneys working actively; still further diminution in amount of blood and albumen; treatment continued.

22d. Improving; pulse and temperature normal; action of skin so profuse as to make the patient almost complain after being wrapped in the blankets, from the excessive perspiration; no blood in the urine; albumen less and œdema much diminished; no change in treatment. From this time until the 27th the case seemed to improve; the appetite returned; the mind continued clear; the œdema lessened very decidedly, and the urine remained free from blood, though the albumen persisted in moderate amount.

On the morning of the last-mentioned date patient was seized with a well-pronounced chill, succeeded by fever, headache, and severe pain in the left renal region. The urine became very bloody and partially suppressed, attended with a decided increase in the albumen and œdema. These unfavorable symptoms continued until the 31st, when they gradually subsided; and September 5th patient appeared convalescent. The anasarca had now entirely disappeared, leaving him much emaciated, and showing, in a marked degree, the effect of his previous illness. He was put upon the use of elix. phos. of fer., quin., and strychnia, and nourishing diet ordered. Strength slowly returned, and on the 15th we discontinued professional attendance.

This case, we think, presents several features decidedly interesting. It confirms the observations of the majority of practitioners, that grave renal troubles are most apt to follow cases mild at the outset. Our experience with scarlatina furnishes no exception to this statement.

We regard the excessive irritability of the stomach, which was the most marked feature of the second relapse, as an effort of Nature to eliminate the urea, which, without doubt, was accumulating in the system. May it not have acted as a safety valve in preventing, at that time, the very dangerous symptoms so prominent in the third attack?

No chemical examination of the urine was made previous to the 19th. Had it been, the presence of albumen in such notable amount, with the diminished renal se-

cretion, would surely have afforded valuable evidence as to the probability of uræmic toxemia. The urgent necessity for such examinations *daily*, is obvious.

Without speculating as to the effect of chloroform inhalations during the convulsions, their repeated occurrence presented a favorable opportunity for testing its power in that direction.

In a recent number of the Philadelphia *Medical Times* is the translation of an article on the treatment of eclampsia, by Jaquet, of Berlin, in which he states that it is, as yet, not positively settled whether eclampsia be the result of uræmic poisoning, or, according to later observers, dependent upon acute œdema with consecutive acute anæmia of the brain. Discussing therapeutical measures from both these standpoints, without committing himself to one or the other theory, he argues that the indications for treatment are the same; in the former by the removal of carbonate of ammonia from the blood; in the latter, by the abstraction of water.

Assuming that these objects are to be accomplished in the same manner in which the urea and water leave the system in health, by the kidneys and skin, and, supposing the renal organs to be so much affected by disease as not to be depended on, although when they have not undergone marked degeneration diuretics are to be employed, he recommends, for the production of a vigorous diaphoresis, the use of the wet packing of the whole body, as employed by Priessnitz.

Eight cases of eclampsia in his clinic were treated in this manner with eminently satisfactory results. In all the effect was unmistakable, and favorable results followed in some instances after the failure of various other remedies.

Jaquet's plan is to wrap the patient in a sheet dipped in *cold* water (72.5°), and then firmly envelop the body in a blanket. We employed *warm* water, the result, in either case, being the same, free cutaneous, and, with us, renal action. The marked benefit following the warm baths in the case we have detailed, producing, as they did, active diaphoresis and diuresis, would seem to confirm the observations of Jaquet. It will be noticed that, immediately the functions of the kidneys and skin were thoroughly resumed, the patient emerged from his semi-comatose condition, and so striking was this result after other diaphoretic and diuretic agents had been used without success, that we think it must be regarded as something more than a mere coincidence.

Professor Martin adds his testimony to the value of Jaquet's plan, and considers it one much to be recommended. We feel convinced that such is the fact, and shall not hesitate to employ it if a case similar to the one we have cited should again fall under our observation.

Medical Societies.

MEDICAL SOCIETY OF CHENANGO CO., NEW YORK.

The tri-annual meeting of the Chenango County Medical Society was held at the Court House in Norwich, Oct. 8th, 1872.

The President being absent, the Society was called to order by the Vice-President, Dr. W. H. Stuart.

The following resolution was presented by the Committee appointed at the last regular meeting of the Society.

Resolved, That there be added to our present by-laws, as by-law No. 26 :—Every person desiring to study medicine and Surgery in the office of any Physician who is a member of this Society, shall be required, before being received as such student, to appear before the Board of Censors, who shall determine by examination his or *her* fitness to enter upon such studies, and if so considered, shall give to such person or persons a certificate, stating that they possess such requirements. George Douglas, W. H. Stuart, and E. S. Lyman, Committee.

On motion the report of the Committee was accepted and the by-law adopted.

On motion, *Resolved*, That a Committee be appointed to draft resolutions on the death of Dr. James Thompson.

Interesting sanitary reports were given, by the different members, of their respective localities. Dr. Ensign reported a case of lumbar abscess, that resulted in complete recovery, while Drs. Avery, B. F. Smith, Johnson and Kinnier cited particular cases in their own practice for general instruction. Dr. McFarland presented two cases of ophthalmic surgery. The Doctor stated that he brought forward the patients to illustrate the effects of Iritis, if not treated early and effectually, and to point out its remedy.

The first case was a boy twelve years of age. Iritis in this case had been followed by occlusion of the pupil and consequent blindness. This condition had been relieved by the operation of Iridectomy. The result was most favorable, as the boy is now able to distinguish coarse print very readily. The second case

was that of a girl sixteen years of age, and sister of the boy. She had been for one year an inmate of the Blind Asylum at Batavia. Iritis in this case was the primary trouble, but extending to the ciliary body had resulted in occlusion of the pupil and cataract, with complete blindness. A preliminary operation of Iridectomy had been performed, which arrested the progress of the disease, and gave good prospect of a restoration of the sight by a subsequent operation for soft cataract.

The subject of cerebro-spinal meningitis was then taken up, and ably discussed. Dr. Corrigan gave a history of the symptoms, progress, and treatment of this disease as found in the wards of Bellevue Hospital. Dr. J. Mitchell made a few remarks upon the treatment of fractures. The Doctor having been for some time connected with the surgical wards of Bellevue Hospital, was able to give an interesting account of the details, operation, and results of the Plaster of Paris bandages.

The Society, on motion, adjourned to meet in Norwich, on the 2d Tuesday in January, 1872.

D. M. Lee, M.D., *Secretary.*

Editorial Department.

Periscope.

The Medical use of Bullock's Blood.

The Paris correspondent of the London *Medical Times and Gazette* writes :—

Alcohol and Bullock's blood are now in vogue among the Parisians; the former for fevers and all inflammatory affections, and the latter for anæmia and pulmonary phthisis. It is a curious sight to see the number of patients, of both sexes and all ranks and ages, who flock to the slaughter-houses every morning to drink of the still fuming blood of the oxen slaughtered for the table. I was struck at the facility with which young ladies take to it, and I have heard many say that they prefer it to cod-liver oil. I shall not enter into any theoretical speculations as to its *modus operandi*, but what I can vouch for is, I know of several cases of anæmia that have been cured, and some of phthisis pulmonalis greatly benefited by the treatment, at least, as much as they would be under cod-liver oil. For the more fastidious, however, a pharmacien has prepared an extract of blood, which is administered in the form of pills, each of which, weighing about three grains, is said to be equivalent to about half an ounce of pure blood.

M. Boussingault, a distinguished chemist, lately read a paper before the Academy of Sciences, giving an account of his researches on the composition of the blood, and expressed his surprise that, containing as it does all the constituents of a perfect aliment, it is not more generally employed as food. This is a subject worthy the consideration of philanthropists, especially in these days, when the price of meat is everywhere steadily increasing, at least among the meat-eating population; and it strikes me that the rivers of blood that are daily spilt on the ground in slaughter-houses might be utilized as food. In Europe, pigs' blood is the most generally consumed in the form of sausagas: but that of all animals, without distinction, might in this way be more usefully employed. It is well known that in the steppes of South America the natives have for a long time used as food the blood of the animals they chased, which they previously coagulate and season with different condiments.

According to M. Boussingault, of all nutritive substances the blood of animals contains the greatest quantity of iron; and although varying in different animals, it is in physiological conditions found in certain fixed proportions in the blood. In man, to 100 grammes of blood, M. Boussingault found 51 milligrammes of iron; in that of the ox, 55 milligrammes: of the pig, 59 milligrammes; and in that of the frog, 42 milligrammes. But it was not only in red blood that iron was found; the worthy *savant* detected it even in colorless blood; and after some experiments he found that the blood of snails contained as much iron as that of the ox or calf, and this he thought was sufficient to demonstrate that the red color of the blood is not due, as is generally supposed, to the presence of iron in that liquid.

On Measuring The Chest.

Dr. Frœhlich, of Dresden, in a recent number of *Virchow's Archiv*, gives for chest measurements the following simple directions, attention to which would insure uniformity of procedure:—The person to be examined should stand in an unconstrained position before the physician, breathing with his mouth shut, and should raise both arms, stretching them out horizontally. A tape not broader than 1 Cm. (about $\frac{3}{8}$ of an inch) should be placed round the chest directly under the inferior angles of the scapulæ behind, and the nipple in front, and should then be read off, first

after the deepest inspiration and then after the deepest expiration, and both data recorded. The author then sums up the results which he has obtained by this method of observation, of which some of the more important are as follows :—The average circumference of the chest measured in 725 healthy men, 20 years of age, was, after deepest inspiration, 89 Cm. (about 35 inches), and after deepest expiration 82 Cm. (about 32¼ inches), the average play of the chest being thus 7 Cm. A circumference of only 75 Cm. (29½ inches) indicates what the author calls an unripe chest, and should exclude the person from military service. A circumference of 750–759 Mm. should, under exceptional circumstances, be considered sufficient for military service ; but when it reaches 760 Mm. (30 inches), if the person is otherwise healthy, then it ought to suffice.

The Cure of Stammering.

Various methods, says the *British Medical Journal*, have been proposed at different times for the cure of stammering, and have been followed with more or less success. The mode of treatment followed by M. Chervin, of Lyons, has lately been the subject of investigation by a competent Commission appointed by the Departmental Council, whose report now lies before us. The three Commissioners (MM. Fonteret, Rassot, and Marduel) state that the system of M. Chervin is successful, rapid, and permanent in its effects; and this opinion is confirmed by numerous reports of earlier date on the same subject, by Commissions appointed in France, Belgium, Spain, etc. They support their opinion by the detailed description of the results achieved in the case of eight patients severely afflicted with bad forms of stuttering, who were submitted, under their observation, to the curative methods of M. Chervin. These patients, or pupils, as the Commissioners call them, were of ages varying from ten to twenty-nine years. None of them could speak without stammering to an extent most distressing to themselves and to those that heard and saw them. In some cases the act of speaking was accompanied with convulsive movements of the mouth and eyes, in others with spasmodic respiration. Some had stammered from their infancy; in others, the defect had been caused by a shock to the nervous system. On June 10th these eight patients were placed under M. Chervin's treatment. On the 20th of June they were seen by the Commissioners, and each of them could then speak distinctly, without stammering or hesitation; and on the 28th they were pronounced cured, speaking then with natural ease and rapidity. The system followed by M. Chervin is simple and rational. He discards all mechanical contrivances; but he teaches the patient, by means of a large number of exercises, gradually to pronounce with distinctness vowels, consonants, syllables, and sentences. He pays great attention to the act of respiration, which he seeks to regulate. He teaches his patient to take, at certain intervals, a slow but normal inspiration, which is succeeded by an even, continuous, and loud expiration, during which pronunciation is effected. The course of treatment takes twenty days. This time is divided into three periods. During the first the patient is restricted to complete silence, so that the old habit may be broken; during the second period the patient is taught to speak slowly and deliberately; and during the third period he acquires the practice of speaking fluently and without clipping the words. This method of treatment is stated to have succeeded in even the most difficult cases, and the good result attained is said to be permanent; but this greatly depends on the patient himself, who must occasionally make use of the means which were first used to cure him of stammering. The cases that are related are of a crucial character. The details of progress are described with care, and the success in every instance was remarkable and convincing; hence the Commissioners report in very decided terms in favor of M. Chervin's process, which they recommend for adoption.

New Method of Treating Small-Pox and Typhoid Fever.

Dr. J. Heine has a long article on this subject in *Virchow's Archiv*, vol. 54. It is in the form of a letter to Virchow, and the treatment described in the paper is quite such as to warrant the author in designating his letter a "schismatic epistle." The treatment recommended is by the external application of solutions of corrosive sublimate, and he claims to have obtained great success by its means in small-pox, especially in petechial or hæmorrhagica small-pox, but also in confluent and other forms. He uses two solutions, one containing 25 and the other 50 grains of corrosive sublimate, in 18 ounces of water and 1 ounce of alcohol. The stronger solution he only uses in petechial small-pox, and continues its use only for a short period ; the weaker is that generally employed. Pieces of clean-washed linen cloth are soaked in the solution, and laid in a double layer on various parts of the body alternately, the parts chiefly chosen being the upper or lower arm, the leg, breast, abdomen, neck ; over the cloth waxed paper is laid in order to prevent evaporation. The average quantity of the weaker solution used in one case, and spread over several weeks, represented an amount of corrosive sublimate equal to 170 to 230 grm. (5½ to 7½ ounces).

The author then gives his ideas as to the action of corrosive sublimate on the human body, and he claims for it four properties. 1. Its effect is unsurpassable in all wounds which have taken on a diphtheritic character. 2. It has a similarly powerful effect in causing absorption of all kinds of exudations in every part of the body. 3. It has an undeniable antipyæmic property which influences this disease up to a certain stage. 4. It has the power

within 4 to 6 days of arresting or moderating fever-symptoms, which depend on general infection of the blood or on local deposits. As showing the last of these properties, the author treats more in detail of the use of the sublimate in typhus abdominalis (typhoid fever), and he asserts that it is able in the initial or more advanced stages of the disease to cut short the fever in the course of 5 to 7 days. The records of four cases with the temperature curves are given, and the amount of corrosive sublimate used in these cases was in grains, 120, 100, 100, and 80, respectively. The solution used was 30 grains to the proportion of water and alcohol given above. The sublimate is sometimes followed by a rather alarming increase in the diarrhœa, but without tenesmus or hæmorrhage. Its beneficial influence, however, is soon evidenced by the change of the color of the stools from the usual pea-soup character, to a saturated bilious color. The other effects of the sublimate as respects urine, nervous symptoms, etc., are also given. The author also claims for the corrosive sublimate a special influence on the action of the heart. The paper concludes with certain considerations as to the present position of medical science.

Arsenic in Red Paper Hangings.

Dr. N. Hallwachs has discovered by qualitative tests the existence of arsenic in gray and red paper hangings to an alarming extent, so that not only green papers, but also those of other colors, must be looked upon with suspicion.

On the Thuya.

In Belgium the leaves of this plant (*Thuya occidentalis*) are macerated for ten days with 10 parts of alcohol, and the solution after filtering administered in cases of smallpox, a dose being ten drops in a glass of water.

Reviews and Book Notices.

NOTES ON BOOKS.

——The lucid and interesting Report on Epidemics and Meteorology, of the Philadelphia County Medical Society, this year, is by Dr. Laurence Turnbull. It has been published in pamphlet form, and will be prized by students of epidemiology.

BOOK NOTICES.

Handbook of Compound Medicines; or, the Prescriber's and Dispenser's Vade-Mecum. By Arnold J. Cooley, etc. Philadelphia, J. B. Lippincott & Co., 1873. 1 vol., clo., 12mo, pp. 219.

We do not partake of the general opposition to formularies which most medical critics take care to express when reviewing books like that whose title we give above. On the contrary, we believe they have a very useful place in professional reading, and were they studied more frequently and carefully, there would be greater accuracy in exhibiting medicines, greater correctness in writing prescriptions, and greater elegance in the preparations which we condemn our patients to swallow. Such considerations are not trifling, nor beneath the notice of the most scientific of us. Moreover, the combining of several natural or artificial products unquestionably materially adds to, subtracts from, or otherwise modifies their respective therapeutic powers, and hence a careful study of compound recipes is often very serviceable.

In Mr. Cooley's work are collected numerous formulæ in use in the London Hospitals as "house mixtures," others gathered from the practice of leading physicians, from foreign pharmacopeias, and the leading proprietary preparations. They are arranged pharmaceutically, that is, as pills, boluses, granules, mixtures, etc. The compiler adds a number of notes, many of which, that on "cholera mixtures" for example, p. 149, are quite instructive. Most of the famous "patent medicines" are represented, and show vividly how gullible the public is, and how much they are seduced into paying for worthless trash by flaming representations and high-sounding names.

Proceedings of the Pathological Society of Philadelphia, vol. iii. Philadelphia, 1871. pp. 218.

The labors of this Society in the field of pathology are too widely and favorably known to require any extolling at our hands. The present volume is full of matter which will fasten the attention of all interested in the study of morbid products. A very large number of autopsies and microscopical examinations are reported. The volume closes with an extract from the Proceedings of the American Philosophical Society, describing a case of universal hyperostosis with osteo-porosis, almost unique of its kind, and which well deserved a place in some more strictly professional medium than where it was first published.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, OCT. 26, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE MEDICO-LEGAL SUPERVISION OF PROSTITUTION.

All physicians, all honest statesmen, all good men cannot but earnestly wish that the vice of prostitution shall be diminished to the uttermost. That it is an "inevitable" attendant upon civilization is a popular theory which we scout and deny. There are no social vices inseparable from civilization. They exist in spite and not in consequence of it. The contrary opinion conflicts with the very definition of civilization, and is untenable on any principle of sociology.

That under the present condition and circumstances of life in large cities, with a numerous floating population, it invariably exists, is a fact against which we do not shut our eyes or want others to. And no wonder, for those before whom it lies most straightly as a duty to repress this vice, have been accustomed either to dodge and shun it as an improper subject to touch or handle; or else, having a theory that any attention to it will make it worse, have diligently shut their eyes to it and bidden others do the same. We are sorry to class among these latter two medical journals in this country, one on the Pacific Coast and one in Chicago, both of which have on several occasions opposed any restriction or public recognition of the evil.

It is absurd to expect that a do-nothing policy can effect any good. This is not a short-lived evil, which will soon run its course. If it cannot be stopped, let it be checked. In England, within the last few years, Parliament has passed the Contagious (Venereal) Diseases Acts, which, in certain districts, bring the prostitutes under both medical and police surveillance. Of course, a party of squeamish prudes and obstructives have howled very loudly on the impropriety of these Acts. But the result has proved how empty such clamor is.

The editor of the *British Medical Journal*, decidedly the most influential and best conducted medical periodical in Great Britain, has repeatedly pointed out the errors of those who oppose these Acts. He has shown that they do not legalize prostitution, but prescribe means for preventing the spread of a hideous disease, which is essentially hereditary, and from which innocent women and children suffer not less severely than those who incur the risks of physical disease in transgressing moral law. If any of those who oppose these Acts do so from a desire to repress prostitution, they labor under error. These Acts themselves impose a penalty on prostitution additional to any which previously existed, and are themselves repressive.

If the excellent persons who disapprove of any toleration of the existence of prostitutes in a State can propose any means, moral, theological, rational, or parliamentary, of arresting the growth of that monstrous evil, which so many ages and so many peoples have hopelessly deplored, they will find the most earnest support from the framers of the Contagious Diseases Acts, and from their supporters. They will do well, however, to review the history of past legislation on the subject before making any

hasty propositions. Penal and prohibitory legislation, in the most varied and severe forms, has proved ineffectual; and it remains an unsolved problem how to stop fornication and prevent prostitution. We are unable to understand why those who have not yet been able to solve this problem or to assist in its solution, should violently oppose the efforts made to lessen the physical evils resulting from the practice, which no one has yet been able to check.

The subject has also been under serious discussion at the recent International Statistical Congress held in St. Petersburg. With regard to the advisability of such legislation there was an entire unanimity of opinion; and it is interesting to know the actual text of the principal conclusion arrived at by a strictly scientific body, in which every civilized nationality was represented. It is as follows:—

"The Congress recognizes the great importance of a serious study of prostitution, and insists upon the necessity of establishing in all large towns a sanitary control, which shall at the same time keep special registers concerning the persons addicted to prostitution."

Much has been said of the experiment tried in St. Louis to place the prostitutes under medico-legal supervision. Contradictory reports have been circulated, some unfavorable ones, in the medical journals above alluded to. We have not felt inclined to accept such premature and biased judgments, but have waited until an official statement reached us after a fair trial of the plan. Such we now have.

We may explain that the principles of the St. Louis system are compulsory registration, location in prescribed districts, physical and sanitary weekly examinations, taxing the class for the expense of hospital and sanitary care, and police protection to those complying with rules, and the establishment of a hospital and house of industry for the exclusive care, medical treatment, and industrial employment of the class. For the support and maintenance of the institution, for the payment of its debts, the advancement of its interests and the humane and reformatory objects contemplated by its establishment, the money collected as hospital dues, payable to the medical examiners, is deposited, through the clerk of the Board of Health, in the city treasury, and placed to the credit of a special fund for this object, and to be withdrawn for no other object.

The city is divided into four districts, and a physician is appointed as medical examiner in each, whose duties are to visit once a week each registered female. Refusal to see the physician imposes a penalty of a fine of from five to one hundred dollars. A diseased woman, or one who harbors her, is liable to a fine of from ten to fifty dollars. Using false or counterfeit registration or physician's card, is punishable by a fine of from twenty to fifty dollars. Harboring an unregistered female of this class is punishable by a fine of from ten to twenty dollars.

The medical examiners are to receive extra compensation for medical treatment; are to make reports each week to the Board of Health, and are to give verbal notice to the women when the official visits are to be made. The women have to obtain permission from the Chief of Police to change residence. Interfering with a medical examiner in the discharge of his duties, or refusing information, is punishable by a fine of twenty dollars. A keeper allowing an "uncarded" woman, or one not having either police or physicians' card, to ply the vocation, is liable to a fine of twenty-five dollars.

The final arrangements to complete the hospital have only recently been made. The officers propose to employ all inmates committed to the hospital and house of industry at such needle work or domestic labor as they may be able to perform, and the amount received for such work shall be collected and placed to the credit of the hos-

pital fund. Any woman desiring to reform may remain an inmate for a sufficient length of time to enable her to procure employment, and for this purpose all proper aid and assistance are to be afforded by the Board of Health. No name is to be erased from the social evil register except by the order of the Health and Police Commissioners. No registered women are to leave the city unless by written permission of the Chief of Police, and such permission is not to be refused, except the applicant is charged with or suspected of some criminal offence or misdemeanor.

At the inauguration of the Hospital, Mayor Brown said:—

By the inauguration of this institution we expect to do more than to attack the evil in a physical point of view. We expect also to reach it in a moral point, by establishing a reformatory institution, where those who are disposed to enter upon a new life will be taught the means of honest self-support, and thus place in their hands the means of resisting the temptations that, owing to their dependent condition, caused them to fall. All this will be accomplished without any expense to the city, as the tax that is levied on these people, and which it is said they cheerfully pay, is ample to provide all, and more, than the necessary funds to carry out this object.

And while on this subject, and as many are of the belief that the fact of legally regulating houses of prostitution causes an increase of the evil, I am happy to be able to state that such is not the fact. There has been an actual decrease of the number of these houses and their inmates since the establishment of this law, and the decrease in disease is fully fifty per cent. If this be the case, I think we all have just cause of congratulation that the cause of humanity is being benefited by the social evil ordinance, and that, looking at past results, it can scarcely longer be called an experiment, but a success in all that its most sanguine advocates claimed for it.

This positive and official testimony to the value of the St. Louis plan should be carefully considered by all Boards of Health, municipal governments, and philanthropists. It is high time that they throw aside the false notions prevalent on the subject, and take an early and decided stand in favor of subjecting prostitutes to regular medical supervision and police registration. We want Philadelphia to follow the good example successfully set in St. Louis. We call upon medical men of the city to press the subject on all fit occasions.

Notes and Comments.

On the Gonlobus Condor-ango.

In the *Journal de Pharmacie* M. Friana says this plant is so called by the natives of the region where it grows, because, according to their account, the condor when bitten by serpents there eats its leaves as an antidote to their poison. *Condor-ango* signifying condor-vine.

As to the medical qualities claimed for this plant the author confesses that he is in doubt, as he does not always trust to the diagnoses of physicians who claim to have used the plant with success in cases of cancer. The results in Europe of the experiments with it have been rather negative in cases of undoubted cancer. The plant is found to belong to the sub-order of gonlobeæ of the order asclepedaceæ, and by a series of eliminations the author places it under the genus gonlobus.

The "Horse Disease."

This contagious epidemic, which has been traveling with great rapidity over the country, from the accounts received appears to be a catarrhal fever, of an epizootic nature, the result of some atmospheric influence, as is shown by its sudden appearance over a large extent of country, attacking all kinds of horses, old and young, in good condition or poor. The premonitory symptoms are dullness, a staring coat, a watery discharge from the nose speedily followed by a severe hacking cough; the pulse is quickened and the mouth hot; the nasal membranes are injected and the ears and legs are unnaturally cold; the discharge from the nose increases and becomes of a greenish-yellow color; the breathing is increased, and in some cases is labored and severe. Although this disease must necessarily prove a great loss and annoyance to the community generally, we do not think it is likely to be of a fatal character where ordinary care and rational treatment are adopted. In several instances the attack has been severe, but generally increased by overwork or some other debilitating influence.

As the disease will run a certain course, affected animals should be carefully used, and allowed plenty of pure air, with a liberal diet of nourishing and easily digested food. The

stables should be well aired daily and thoroughly ventilated; and it is also advisable to use disinfectants, as the chloride of lime or carbolic acid. When the throat is very sore, causing a difficulty in swallowing, a mild embrocation should be applied, and the fever allayed by mild febrifuge medicine.

Some newspapers have reported that this disease, like glanders, is communicable to the human race. We take it, however, that proof of this has not been shown, and most probably it is a sensational feature of the accounts.

Ozone in the Atmosphere.

Some researches on native ozone are given in the *Journal de Pharmacie*, by M. A. Houzeau. The air in the open country, taken at a distance of 2 metres above the ground, contains at most, according to this author's investigations, 1-450-000 of its weight of ozone, or 1-100,000 part of its volume. (Density of ozone 1.658 according to Loret.) This amount increases the farther it is from the ground, though it is in all cases quite variable. Litmus paper half iodized in the atmosphere showed the following colors:

NUMBER OF HOURS EXPOSED IN CALM AIR.

2	*4*	*6*	*8*	*10*	*12*	*24*
none	violet	very pale blue	very pale blue	blue	blue	very blue

NUMBER OF HOURS EXPOSED IN AIR AGITATED.

2	*4*	*6*	*8*	*10*	*12*	*24*
pale violet	violet	pale blue	blue	very blue	very blue	blue

Its origin is undoubtedly electric, and this the author believes is due in great measure to the silent discharge of electricity from the clouds to the earth.

Cure for Corns.

A correspondent of the *Country Gentleman* states that he has found the following a simple and effectual remedy for corns. "Bathe the feet in tepid water, to soften the corns; pare these off very closely with a sharp knife; then rub on well, green peach-tree leaves; when, after continuing the rubbing once or twice a day, the corns will disappear.

Poisoning by Vanilla.

Schroff says that the natives of Mexico and South America use a kind of oil, Acajou oil, to make the vanilla bean flexible and soft, and that this oil often contains a sharp substance like the Cantharides. He attributes the poisonous proprieties of vanilla to this latter substance.

Hair-dye.

Harmless hair-dye is made in Greece from green walnut burs (Juglans regia), by extracting with water and evaporating until the Regianic acid is precipitated as a black powder.

Hyoscyamine.

This alkaloid has the formula $C_{30}\ H_{23}\ NO_6$. It is prepared by treating the henbane seed, first with ether to remove the fatty matter, then with alcohol, to which a few drops of sulphuric acid have been added. The alcoholic solution is distilled, the residue neutralized with soda, and the water solution precipitated with tannin. The precipitate is then dried, mixed with lime, and finally treated with strong alcohol, and this solution is treated with sulphuric acid, and then with soda, and finally ether added to dissolve the liberated hyoscyamine. The base is decomposed by baric hydrate to hyoscinic acid and hyoscine, e. g.

$$C_{30}\ H_{23}\ NO_6 = C_{18}\ H_{10}\ O_6 + C_{12}\ H_{13}\ N$$

Hyoscyamine Hyoscinic acid Hyoscine.

On Galvanism in Apparent Death from Chloroform.

In reference to the strictures on the use of chloroform in this journal (No. 816, Page 377) our attention has been called to the importance of employing galvanism as a means of resuscitation. The rotary battery now in general use answers the purpose well.

In the *British Medical Journal*, May 25, 1872, Dr. Thomas Green, surgeon to the Bristol Infirmary, reports a number of cases of apparent death from chloroform which were promptly restored by the immediate use of the galvanic battery. This simple instrument should always be at hand and applied without any delay. It will bring about immediate muscular contractions and respiration.

"Normal Ovariotomy."

This is the name applied by Dr. Robert Battey, of Rome, Ga., to the extirpation of the healthy ovaries in the human female. He operated thus on a young woman suffering from dysmenorrhœa, and reports the details in the *Atlanta Medical and Surgical Journal*, Sept. 1872, (also republished in pamphlet form). She recovered, but whether it cured her or not, is not stated. Dr. Atlee reports cases where the menstrual molimen with sanguineous discharge and all the symptoms of regular menstruation occurred after both ovaries were entirely removed. For this and other reasons the operation of Dr. Battey will meet with considerable criticism.

The Item "Eight Children at a Birth."

In reference to this item in the Reporter of Oct. 5th, which we quoted, with a very natural intimation of more than doubt, from the *Boston Medical and Surgical Journal*, Mr. Holbrook, the editor of the *Herald of Health*, writes us:—

"The above is an old story, and has been going the rounds of the papers for ten or twelve years. It is a hoax which first appeared in the

Cleveland *Herald*, written by a neighbor of the woman, Mrs. Brodlee, and denied by her husband a few days after. The fact that it occasionally gets into the medical journals gives it new vitality and keeps it going."

Correspondence.

"Permanent Cures."

Eds. Med. and Surg. Reporter:

I have been interested in the contributions of Dr. Barrow, of Baltimore, to your journal. Dr. Barrow is evidently a physician of large practice and rich experience.

If there be any part of his graphic reports to which I might be disposed to take exception, it is the jubilant tones in which he is very apt to refer to certain results of his as "permanent cures." It is possible that I do not apprehend the sense in which Dr. Barrow uses the term. What are we to understand by a "complete" and "permanent" cure? Perhaps Dr. Barrow will enlighten us. If Dr. Barrow's patients, who have such terrible symptoms, "pulmonary hemorrhages, with hacking cough, emaciation, debility," etc., are not only *cured*, but *stay* cured, he is to be envied. My experience leads me to believe that *complete* and *permanent* cures (using the words in their ordinary significance) are rare. Some structural weakness, some organized tendencies to the disease, are apt to remain; perhaps a vitiated condition of the blood, from which results that the cure is neither so complete nor so permanent as could be desired. This is much more apt to be the case with respect to chronic diseases. Very rarely indeed do we find occasion to write over against the names of our chronic patients "completely and permanently cured."

And this reminds me that one of my chronic dyspeptics, whose solemn countenance has for the past year twice a week regularly disturbed my after-dinner meditations, and who is sometimes better, sometimes worse, yesterday told me that he was going to pay my bill when he was perfectly well! "Then," thought I, "My game is up! If I wait till you are 'perfectly well,' I shall wait till the crack of doom!"

It is with no disposition to captious fault finding that I submit this brief criticism. I think it quite probable that Brother Barrow has better luck with his patients, both acute and chronic, than I have had.

I close with the following memorandum from personal experience. In one respect *I* am a chronic invalid! That is, I have a catarrhal infirmity for which I have long sought a permanent cure. Seneca, and all other remedies have failed to cure. I am at times relieved, but do not *remain* cured. There is probably a hyper-sensitiveness of the Schneiderian membrane which will always require *humoring*. I am satisfied that *no* hygienic or medicinal treatment will ever effect a permanent cure.

There are multitudes like me, with their little infirmities ("thorns in the flesh"), to whom a "permanent cure" would be an elysium which they certainly do not expect in this life.

E. P. Hurd, M.D.

A Rare Case, Hysteria in a Male.

Eds. Med. and Surg. Reporter:—

September 27, 1872, I was summoned, in haste, to visit F. C., aged 20, who was reported in imminent danger of death. I found him in a state of active delirium, tossing wildly about, and exhibiting a prodigious amount of strength, requiring the combined efforts of three men to restrain him; face congested and pulse frequent. I learned that he had complained of cephalalgia during the afternoon, but retired at the usual hour. His room-mate followed shortly after, and on getting in bed, his attention was attracted by the young man's peculiar respiration. He was on the point of making some inquiry as to his health, when the patient, with a shriek, leaped out of bed, carrying bed clothes and bed-fellow with him. Then began a series of convulsive seizures, alternating with violent mania; patient gasping for breath; clutching his throat as if to remove some obstruction; screaming, grasping his hair, and, in fine, presenting as complete an attack of hysteria as I ever witnessed.

He had a well-marked convulsion soon after my arrival; injected gtt x sol. magend. in the forearm; effect apparent in five minutes; no subsequent convulsion. Mania gradually subsided, and, at the expiration of half an hour patient was quiet, save occasional shouting and starting up in bed. Repeated injection, gtt x, and in fifteen minutes patient was sleeping soundly. Slept for three hours, and, on awaking, passed a large quantity of urine. Fell asleep again, and after four hours, awoke perfectly rational. Next day some complaint of pain in the head, which was speedily relieved by a sinapism to the nucha. Second day after, patient was about, and his case dismissed.

The foregoing history is interesting, from the rarity of hysterical manifestations in the male, and the markedly controlling effect of the morphia hypodermically administered.

J. B. Mattison, M. D.

Chester, N. J., Oct. 18, 1872.

News and Miscellany.

Promotion.

Dr. David P. Smith, of Springfield, has been appointed surgeon in the regular army, with the rank of lieutenant-colonel.

Dr. Henry H. Smith has removed his office from 1112 Walnut street to 1800 Spruce street.

Oral Instruction for the Deaf and Dumb.

The system of instructing deaf mutes by lip reading and articulate speech has been adopted in England with gratifying success. To a limited extent it has also been introduced into this country, and we are pleased to announce to our readers that we shall shortly lay before them an exhaustive article upon it, with illustrations, from the pen of Dr. L. TURNBULL, of this city.

The Small-pox.

The small-pox is increasing in Washington, the new cases during four days recently having been fifteen, and the deaths seven. From the 1st of January to the 2d inst. 456 cases were reported, and since the 1st of June 257 cases and 60 deaths. Of these 60 deaths 38 were of persons who had never been vaccinated, and 12 of persons who had been "unsuccessfully" vaccinated.

Last week, in this city, there were two deaths, and in Boston seventeen from this disease.

Appointment.

Dr. A. B. Arnold has been appointed to the chair of Materia Medica and Therapeutics in the Washington University, of Baltimore. This is an excellent appointment, as Prof. Arnold has for years been a close student, and a hard thinker, and, having a very extensive practice, can speak with authority on many of the vexed questions of medicine.

Religion in Hospitals.

The Lady Managers of the Brooklyn Homœopathic Lying-in Hospital have discharged Dr. Monmonierre, the resident physician of the institution, because he is a Roman Catholic. Six of the eight physicians attached to the hospital have resigned in consequence, and Henry Ward Beecher has "uttered an indignant protest."

THE Passaic County Medical Society has admitted a female to its membership, thus declaring itself in favor of woman's rights.

NOTES AND QUERIES.

Dr. Napheys' Surgical Therapeutics.

Dr. J. M., of New York.—Dr. Napheys is occupied in preparing his promised work on Surgical Therapeutics, and we hope to announce it as ready next spring.

Dr. T. J. Corson, Trenton, N. J., will sell a set of the *New Jersey Medical Reporter*, from 1847 to September, 1858 inclusive, complete (quarterly and monthly), neatly bound in eleven volumes. That journal was the predecessor of the MEDICAL AND SURGICAL REPORTER, and was for eight years managed by Dr. BUTLER.

MARRIAGES.

FRITZINGER—SPINNEY.—On the morning of the 16th inst., at the residence of A. P. Spinney, Esq., Ashland, Pa., by Rev. J. E. Meredith, of Philadelphia, Richard J. Fritzinger, M. D., eldest son of Rev. Jared Fritzinger, of Bath, Pa., to Miss Maze M. Spinney, of Ashland.

AYER—WENTWORTH.—In Bucksport, Maine, Aug. 30, by Rev. G. N. Eldridge, Dr. Sewall P. Ayer, of Saco. Me., and Miss Hattie T. Wentworth, of Bucksport.

BRIGHAM—ATHERTON.—In Waterbury, Vt. Oct. 2d, by Rev. J. E. Wright, of Montpelier, Dr. Homer C. Brigham, of Northfield, and Miss Nell Atherton.

DE MUND—WORTENDYKE.—Oct. 9, 1872, at the residence of the bride's parents, Wortendyke, N. J., by Rev. Isaac T. De Mund, John T. De Mund, M.D., of Ridgewood, N. J., and Christina L., eldest daughter of C. A. Wortendyke, Esq.

DIX—WELCH.—In this city, Oct. 16, at the residence of the bride's parents, by the Rev. Wilbur F. Paddock, D. D., John G. Dix and Sallie E., daughter of Dr. James Welch.

DUNNING—BALDERSTON.—On the 8th inst., at the Green street M. E. Church in this city, by Dr. C. Cook, Minister, assisted by Mr. Langley, Pastor, Thomas S. Dunning, M. D., of Middletown, Del., and Lydia, daughter of S. F. Balderston, of this city.

HANDERSON—ROOT.—Oct. 16, 1872, at St. Luke's Church, Hudson street, by Rev. Isaac H. Tuttle, D.D., assisted by Rev. Alexander Capron, Henry E. Handerson, M. D., and Juliet A., daughter of Milo B. Root, all of New York.

HANLY—WAY.—In this city, Oct. 10, by the Rev. Thomas A. Jaggar, M. Abbott Hanly, M. D., and Amanda A., daughter of J. Tunis Way.

MOSSMAN—HILANDS.—On the 5th of September, at Greenville, Pa., by Rev. J. E. Wright, Dr. B. E. Mossman and Miss Emma Hilands, all of Greenville.

SCHULTZ—MAGILL.—At Danville, Pa., on September 27th, by the Rev. W. C. Cattell, D. D., President of Lafayette College, Easton, assisted by the Rev. A. Jack, Dr. S. S. Schultz and Miss Hannah L. Magill, daughter of Dr. W. H. Magill, all of Danville, Pa.

SHELDON—BELL.—In Tarrytown, N. Y., on the 2d of August last, by the Rev. J. J. Smith, of Tarrytown, D. L. D. Sheldon, M. D., and Miss Elizabeth M. Bell, both of New York.

TEWKSBURY—CARR.—In Goffstown, N. H., Oct. 8th, by Rev. S. L. Gerould, Henry W. Tewksbury, of Manchester, N. H., and Miss Carrie R., daughter of A. F. Carr, M. D., of Goffstown.

WORTHINGTON—CARPENTER.—In Cincinnati, on the 10th inst., by the Rev. Thomas S. Yocom, Mr. William Worthington and Miss Susan E. Carpenter, daughter of Dr. I. B. Carpenter.

DEATHS

CHILDS.—Dr. Thomas Childs, a well-known physician of Bath, Me., died on the 2d inst., from the effects of injuries received by being thrown from a carriage recently.

HALL.—In Cumberland Centre, Me., July 26th, of typhoid fever, Dr. F. S. Hall.

IRVIN.—Oct. 16th, James H. Irvin, M. D., of this city.

SMITH.—Oct. 11th, at his father's residence, Orange, N. J., Dr. J. Pascal Smith, late of Chicago.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

WHOOPING COUGH COMPLICATED WITH BRONCHITIS, COLLAPSE OF LUNGS AND CONVULSIONS SIMULTANEOUSLY.

By Jno. T. Hughson, M. D.
Of Sumter, S. C.

On Sunday, 21st July, 1872, I was hastily summoned, at 2½ o'clock P. M., to see ——, aged 3½ years.

This little patient was suffering from Whooping Cough in the second stage, and had the week previous a mild attack of intermittent fever, which readily yielded to treatment.

Upon entering the room I found him in a severe convulsion and the mother about to place him in a warm bath, which was immediately done. The respiration was rapid and painfully oppressed. Mucous rales distinct over lower lobes, and in fact over the greater part of both lungs there was dullness on percussion; no respiratory murmur discoverable; pulse rapid and weak; extremities cold. Convulsions returning he was again placed in the warm bath, when the muscles relaxed, the eyes closed, the head fell back, and respiration entirely suspended; could feel no pulsation of either the radial or temporal arteries, but the heart beat *feebly*. I thought grim death was claiming a victim from that household when the child gently gasped.

With abundant fresh air, mustard sinapisms to wrists, ankles and nape of the neck, and good rubbing, he began to show some signs of life.

I diagnosed this as a case of severe Bronchitis with congestion and collapse of the lungs, with convulsions attending. Ordered a mustard poultice over the front of the chest; infused a teaspoonful of pulv. ipecac in a wineglass of warm water, and gave a teaspoonful of the infusion every five minutes; cleaned the lower bowel by an enema, then injected thirty drops of tinct. valerian in a little warm water. After several doses of the ipecac had been taken (more than I thought would have been required), he vomited, relieving *slightly* the oppressed breathing by clearing away some of the mucus collected in the throat. Then ordered tinct. valerian, ten drops every half hour for four doses, and the following mixture:

℞ Syr. ipecac, ℥j.
Co. mixt. glycyr.
Aquæ aa ℥ss. M.

Sig. One quarter teaspoonful every two hours.

At 3½ o'clock he noticed a little, was apparently conscious. Being obliged to leave at four o'clock I returned at six, and found very little change except bounding pulse with high fever. Continued the valerian at longer intervals, the mixture as directed. At 10 P. M. he was in the same stupid condition, noticing nothing, breathing, perhaps, a little easier, fever high, tongue coated. Prescribed

℞ Calomel, grs ij.
Ipecac, gr. j. M. Make eight powders.

Sig. Give one every hour except when asleep. Teaspoonful of castor oil to be taken at 5 o'clock in the morning.

Stop the valerian unless nervous twitchings appear.

July 22d, 8 o'clock A. M. Breathing still rapid and oppressed; respiratory murmur indistinctly heard in upper part of lungs; dullness on percussion; bowels acted; slight remission in the fever; tongue *heavily* coated with a whitish fur. Ordered mixture continued and prescribed following:

℞ Quinine grs. viij. Divide into four powders.

Sig. Take one every two hours.

23d. Last night fever high; very restless; cough frequent; remission in the fever about the same time this morning; tongue still heavily coated; notices a little more. Treatment as before. Take to-night four grains of calomel. Directed a teaspoonful of sweet milk to be given every hour.

24th. Rested some better last night, breathing easier, expectoration more profuse. Bowels acted well. The remission in the fever a little earlier this morning. During the day, while coughing, he threw off a tubular shaped mass of *viscid*, purulent expectoration, a little more than an inch in length, and exact shape of the bronchi; the vesicular murmur was then heard more generally over the right lung. Continued quinine, and substituted in place of mixture in use the following:

℞ Syr. ipecac, f.3v.
, Vin. ant.,
Swt. spts. nitre.
Syr. acaciæ, aa f.3j. M.

Sig. Twenty drops every two hours. Milk to be continued, and two drops of brandy, three (3) times a day.

25th. Fever abating. Remission came on two hours earlier this morning. Breathing easy, having thrown off another yellowish viscid tube of expectorated matter, of nearly the same size and of same character as the one yesterday. Respiratory murmur becoming more distinct over both lungs. Expectoration free. Quinine continued; give cough mixture every three hours, instead of two as heretofore. The brandy continued, and arrow-root custard allowed.

26th. Symptoms all favorable; breathing easy; tongue cleaning from the tip and edges; bowels regular; but little fever during the night. Treatment continued, with improvement in diet; chicken water or beef tea to be given.

29th. A continued improvement has daily taken place; no fever; tongue cleaning well; auscultation and percussion reveal no abnormal condition of the lungs. Quinine continued; the cough mixture suspended, with the substitute of a mixture for the whooping cough proper.

30th. Improving rapidly. Appetite good; allowed generous diet. Ordered two grains quinine three times a day.

31st. The case discharged.

This case is an interesting, and at the same time peculiar one, from the combination or complication of diseases, and from the suddenness of the attack. He was *apparently* well that morning, and was playing in the entry or passage of the house; the atmosphere was somewhat cool and damp, it having rained the evening previous. A few minutes before being taken he complained of feeling badly, went into the room and lay on the bed, when his breathing became laborious, he complained of his throat and the convulsions came on. I consider the case as produced from *sudden* cold falling on the weaker part, the throat and bronchial tubes, already irritated from the whooping cough; the convulsions resulting from nervous irritation, the sensorium exerting its reflex power on the muscular system; the atelectasis from the swelling, thus decreasing the size of the bronchi; the mucus thrown out by the inflamed membrane in connection with the expectoration of previous cough thus clogging to a considerable extent the tubes, and preventing access of air to the air vesicles, notwithstanding the mighty efforts made at each inspiration to inflate the collapsed tissue.

BONY TUMOR IN THE EYEBALL PRODUCING SYMPATHETIC IRRITATION OF THE OTHER EYE—ENUCLEATION—RECOVERY.

By J. Hale, M.D,
Of Owensboro, Ky.

History.—Mr. B., aged 28 years, when a child six months old, was placed on a bed fronting a window, where he remained for some time, the sun shining through the window into his face. When he was removed from the bed by his mother she discovered that one of his eyes was looking very weak, which in a few days became very much inflamed and intolerant to light. This condition continued for several weeks, but gradually grew less in intensity, until all active symptoms disappeared. He continued, however to have occasional attacks of

inflammation in the eyes, which would last two or three weeks and gradually disappear. This condition of things continued until he was four years old, at which time his mother discovered that he was entirely blind in the diseased eye. After this time he had but little trouble, until he was about twenty years old, at which time he had a violent attack of inflammation in the blind eye, which lasted for several weeks, and was so intense that he had to confine himself in a dark room. He finally recovered from this attack, but was soon attacked again in the same way. The healthy eye at this time became affected to such an extent as to confine him to a dark room. These attacks continued to recur every few months up to the time I saw him twelve months ago. He was then laboring under active inflammation of the blind eye, with sympathetic irritation of the other eye. The blind eye was sunken in the orbit, slightly atrophied, and felt very hard.

The other eye was considerably inflamed, and so extremely irritable that he could not bear the slightest light in his room. He suffered severely with ciliary neuralgia in both eyes. I gave him morphia freely, and advised the constant use of cold water to the eyes, with the instillation of atropia (two grains to the ounce of water) every three hours, to be continued until the active symptoms subsided. At the end of three weeks (all active symptoms having subsided) I enucleated the blind eye. The operation proved a complete success in relieving the patient of his protracted and painful ailment. He has not had the slightest trouble with the remaining eye since the operation.

On examination of the enucleated eyeball I found in it a complete bony cup, extending from the ciliary processes to the entrance of the optic nerve, where there was a perforation through which the nerve passed. The cup at the optic nerve entrance was about three lines in thickness: but gradually grew thinner from the perforation to its border, where it was quite thin. Its outer surface was in contact with the pigment stratum of the choroid, which adhered to it in several places, but could easily be separated from it. On the inner surface of the cup rested the retina, which had been pushed forward by the bony formation until it was in contact with the lens, which was opaque, of normal size, and partially cretafied. Traces of the hyaloid membrane could be seen between the lens and retina. The vitreous humor had been entirely absorbed, except a thin stratum which remained between the border of the lens and the osseous cup, which was opaque, and semi-solid.

I have recently noticed the report of four cases similar to the one under consideration, three in the *Richmond and Louisville Medical Journal*, and one in the *Transactions of the American Medical Association* for 1870. In all of these cases the ossific deposit was found between the choroid and retina, and not involving any of the structures of the eye; such cases are of interest both to the surgeon and pathologist.

By timely enucleation the patient is not only relieved of great pain and disability but is protected against the great risk of losing the other eye, which always sympathizes to a greater or less extent.

From the history of the case under consideration, and also of the other cases mentioned, it would seem most probable that the ossific deposit in these cases had been the result of inflammation. And from the location and extent of the formations, the choroid was most likely the site of the inflammation. The limit in extent of the formation was confined to that of the choroid, and their relative position such that they could not have been the result of inflammation of any of the other structures of the eye.

Medical Societies.

VERMONT MEDICAL SOCIETY.

The Vermont Medical Society held its annual session at Montpelier on Wednesday and Thursday, October 9 and 10. The president, Dr. E. F. Upham, of Randolph, called the Society to order, and prayer was offered by Rev. Mr. Glazier, chaplain of the Senate.

Drs. E. D. Ferguson and Barton were present as delegates from the Medical Society of New York.

Dr. Bradford gave the details of the case lately reported in the papers, of a man in Waitsfield having vomited two snakes.

The reports of such cases being often exaggerated and sometimes not authentic, Dr. Bradford took occasion to learn the exact facts in the case, procured the snakes that were said to be vomited, and presented before the Society. The man had no knowledge of having swallowed anything of the kind, nor was he

suspicious at any time that his stomach contained any such animals, but he remembers that when at work he was in the habit of drinking from some pools of water in his pasture, which he made for that purpose by scraping out with his hands a depression in which the water might collect. His peculiar symptoms began on the 8th of May last, were repeated in June and again July 30th, when he vomited two snakes about six inches long. They were vomited in his own home and in the presence of his family, so there can be no mistake about the fact of their having been ejected from the man's stomach.

The reptiles are a species of water snake which propagate in just such localities as the man describes, and probably, when the parent snake uttered her note of warning of approaching danger to her young, they mistook the open mouth of the drinking man for that of their mother, and found their grave instead of their place of security; they were ejected dead.

During the session of the Society, Dr. Janes gave the history of another case in which an evitt was vomited, and alluded to the general literature of the subject, from which it appeared that well authenticated cases of this kind are not numerous; the simulated cases are more frequent.

Dr. H. S. Brown furnished some interesting details of what purported to be a new form of disease in his locality, which has been termed gastric fever, as he thought erroneously. The subject was referred to Drs. Bullard, Hyde, and Brown, for further investigation and report at the annual meeting.

Drs. J. C. Harman, of Westford, C. M. Ferrin, of Essex Junction, Henry Boynton, of Woodstock, Albert Barnes, of Stowe, and W. H. H. Varney, of Charlotte, were admitted to membership. Dr. A. J. Hyde read a paper giving the details of an interesting case of uterine disease; referred.

The President's address was delivered at 4 P. M. on Wednesday, and was general in its character and elicited a vote of thanks from the Society.

Dr. J. L. Chandler read a paper on *Hahnemann and his dogma*, which was referred to the Committee on Publication. Dr. S. Putnam presented a paper on *Puerperal Convulsions*, which was followed by discussion. Dr. L. C. Butler, from the Committee on Compulsory Vaccination, reported that in their opinion State legislation upon this subject was important and needed, but was impracticable both as to the probability of its enactment and more as to its enforcement, and recommended that physicians make a specialty of vaccination in each of their localities.

Dr. C. M. Chandler read a sketch of C. M. Rublee, late of Montpelier.

The officers elect for the ensuing year are as follows :— President, Dr. H. D. Holton, of Brattleboro; Vice President, Dr. E. S. Peck, of Burlington; Secretary, Dr. L. C. Butler, of Essex; Assistant Secretary, Dr. C. W. Peck, of Brandon ; Treasurer, Dr. D. G. Kemp, of Montpelier.

The semi-annual meeting is to be held at St. Albans, on the last Wednesday and Thursday of June, 1873.

ISSAQUENA COUNTY (MINN) MEDICAL SOCIETY.

At a meeting held at Rolling Fork, Minn., July 17, 1872, the physicians of Issaquena County organized the "Issaquena Medical Society," and elected the following officers to serve for a term of twelve months:—

J. C. Hall, M. D., President ; R. J. H. Halchett, M. D., Vice President ; J. W. Ellis, M. D., Recording Secretary ; Burleigh Goodman, M. D., Corresponding Secretary ; E. C. Clements, M. D., Treasurer. At the last meeting the Secretary was instructed to communicate and request the publication of the fact of the above organization in the next number of the Medical and Surgical Reporter. The Society will meet hereafter on the first Saturday in each month.

Burleigh Goodman,
Corresponding Secretary.

Editorial Department.

Periscope.

The Treatment of Goitre.

This topic is treated of by Dr. C. Schwalbe, of Zurich, in the last volume of *Virchow's Archiv.* His article is interesting, the results arrived at being based on 106 cases, of which notes were made. In order to the treatment of goitre, it is of consequence to decide as to the exact nature of the swelling, and so the author gives a short description of the various kinds, chiefly with the view to diagnosis. There is first the glandular form (struma follicularis mollis of Virchow), which consists of a hypertrophy or hyperplasia of the thyroid gland, and which forms a soft and elastic tumor, not unlike a lipoma. There is further, the cystic goitre, in which it is usually easy to detect fluctuation. The commonest remaining forms are the fibrous and vascular, the former distinguished by its hardness. As an important aid to the diag-

nosis, the author nearly always resorts to puncture with a perforated needle, and the proceeding is of particular advantage in distinguishing between glandular tumors and cysts. The glandular tumors not unfrequently give a false feeling of fluctuation; and on the other hand it is often impossible to detect fluctuation though the tumor is cystic, and in these circumstances puncture is of great service; the fluid which issues when the disease is cystic at once determines its nature. The fibrous forms are also distinguished on puncture by the density of the tissue, and the vascular by the free flow of blood. In his treatment the author trusts, in the first place, to the internal administration of iodide of potassium, combined in almost every case with the local injection of tincture of iodine, or simple alcohol. In very recent cases the use of the iodide (he gives it to the amount of 1 gramme, or about 15½ grains daily) is sufficient to dissipate the swelling, but usually injection is also necessary, except in the vascular forms. In respect to the material to be used in injection, the author believes that the benefit derived from the injection of tincture of iodine depends chiefly on its alcohol, and that rectified spirit is in most cases of equal use. The internal use of KI or I is undoubtedly of great benefit, but there is no reason to believe that the iodine has any special effect when applied locally, and the author has found that the injection of alcohol with the internal administration of the iodide has as good results as the injection of the tincture of iodine. To the surgeon there can be no comparison of the cleanliness and convenience of alcohol as compared with the tincture of iodine. The quantity injected varies in different cases; in the glandular forms only small injections were used, about 10 to 20 drops; and even smaller quantities in the fibrous. But in the cystic form much larger quantities were used, as much as 4 grains being injected into a cyst as large as a duck's egg. The author has not made much use of electrolysis in the treatment of goitre; and he employs it chiefly for the vascular and fibrous forms. Incision of the cystic form he has very seldom resorted to, and only where the tumor was very large.

In conclusion, it is stated that by these means he has only once failed to effect a cure, this case being one of the very hard, fibrous form; at the time it was under treatment he had no constant current battery at hand, and he thinks it possible that he might have come to some result if that treatment had been used.

Methods of Treatment.

In his recent address before the British Medical Association, Dr. T. M. Wilks said:

Next to the evil of allowing some metaphysical idea to influence our mind is the fault of taking a scientific fact or principle, and making it explain a number of obscure phenomena without our possessing any data to guide us as to the correctness of the application. With one, a chemical theory is made to solve all abstruse questions in physiology and pathology; with another, cell-growth can do the same; and with a third, a nervous influence can accomplish all things. See, for example, what a remarkable experiment of Bernard has done for us. He divided the sympathetic in the neck of a rabbit, causing the temperature to rise, and the part to become more vascular. It seemed clear, from this experiment, that the vascular supply is dependent on nerve influence, and thus we are introduced into a new domain of vaso-motor and trophic nerves. What has been the consequence? Every ingenious man has sat down in his study, and assisted to flood Medical literature with explanations of physiological action, morbid processes, or the therapeutic operation of medicines, founded on the theory. Nearly every disorder of the nervous system, be it of an apoplectic or convulsive nature, as well as a large number of other morbid phenomena, can be now accounted for on the theory of an altered vascular supply through the vaso-motor nerves. The operation of many drugs is now made apparent by the influence they exert on nutrition through these nerves, the only difficulty being in the fact that the medicines have different actions, whereas the vessels are only susceptible of dilatation or contraction. It is for this reason that theoretical men have found strychnia and belladonna the two great agents for rousing and depressing the nerve-centres, thus enabling them to hold in their grasp the maladies supposed to be dependent on their rule. This great idea has been much simplified by substituting heat and cold, and thus these nerve-governing powers of the human body being stimulated to increased action by the one, or their over activity controlled by the other, every single complaint to which the human body is liable can now be cured, and all by means of spine-bags. I take this as one example of our eagerness for more knowledge; there are very few on this earth who are presenting us with new facts, or, rather, revealing to us some hitherto hidden secret of nature; and when they do bestow upon us the result of their labors, we grasp it, we hug it, we cannot make enough of it, until in the end we all become ridiculous. What we want are more facts and more truth; the praise cannot be too great which is bestowed on those who are silently working in their laboratories for our advantage. It is more light and knowledge that we want.

A scientific treatment appears to me to require a knowledge of disease, to understand the meaning of the symptoms, and then to have a better acquaintance with the action of drugs. Why, look at the pulse; every one can feel a pulse and understand its indications, except some of those clear-sighted men with whom we sometimes meet, and who declare that it takes a lifetime to understand its significance. Think for a moment of the pulse and some of the more evident circumstances which must in-

fluence it, or rather regard it as the resultant of a number of forces variously combined; why, the machinery is far more complex than any you manufacture in this town. There is the ventricle itself, affecting the pulse by the force, number, and regularity of its beats; then there is the condition of the orifice; then of the blood-vessel, its size and elasticity; thirdly, the state of the channels into which the fluid flows; again, the receptacles beyond them, and their facility or not of receiving the current of blood; then there is the quality of the blood itself; and, lastly, the intensity of the controlling influence over all. That all these conditions, and even more, are at work, is seen by the varied tracings of the sphygmograph, the importance of which a distinguished physician of this town (Dr. Forster) was one of the first to recognize. Now, I apprehend a true knowledge of the pulse would be the facility of appreciating how any one of these conditions mentioned was at fault; and a scientific treatment would be the appropriate remedy for it. I consider the pulse as a case showing the difficulty in acting on scientific principles; for supposing the sphygmograph should now enable us to administer appropriate treatment, it shows that my proposition was true before its discovery. My great objection to the idea of scientific therapeutics is, that it necessarily implies acquaintance with diseased action as well as the meaning and importance of symptoms. What, for example, is the scientific treatment of cholera? "To try and check the fatal discharge," says one; "To let it flow," says another. In the meantime, and whilst the scientific question is being solved, I consider it a disgrace to the profession that we are not yet agreed as to the best hygienic methods under which the greatest number get well. What, again, is the scientific treatment of fever? This a few years ago would have been considered decided, if unanimity implied truth; for amongst other rules, it would have been strictly laid down that whilst the patient should have fresh air, he must by no means be chilled. This idea, however, seems to be a mere phantasm of the human brain, for we now hear that placing the patient in a cold bath is the most successful scientific treatment. So opposed to our notions does the advisability of placing a patient in a cold bath seem, that he who had attempted it years ago would have almost regarded himself as a murderer had the patient died; yet now the treatment is considered rational. As matters of minor consideration in this same disease, we daily ask ourselves whether it is better or not to encourage the sweating; whether it is better or not to remove the articular inflammation; and we make the same inquiries with regard to many other diseases. Whilst we are asking these questions, and obtain no reply, in our present state of ignorance of the signification of symptoms, we point to the man who can show the greatest number of cures as the best practitioner, who is content, at present, with knowing that he has a large number of valuable drugs in his Pharmacopœia, which he finds eminently useful in particular cases; first having made the diagnosis, and then administering the drug. I believe that all reasoning on the matter naturally leads to my conclusion; but, if I look around and see what is practically being done, I feel no doubt of the justice of my remark. I see that the best advisers are those who most skillfully lead their patients through a difficult illness, guided only by experience; whereas, I, on the contrary, see the very worst practitioners and the most ignorant amongst those who act on fancied scientific principles. Again, extra professional persons, who have no knowledge whatever of medicine, are they who are almost exclusively influenced by that kind of reasoning which is styled scientific. A sick man, you know, does not like to take his physic blindly; he will know the why and the wherefore of its administration; and the more clear it is to him that the medicine is to act on this organ, or relieve this or the other symptom, with the greater pleasure does he swallow the dose. The whole train of reasoning must be wrong in such a case; but that is of little consequence to him. All quackery has for its basis science, falsely so called; and it is because of this that uneducated persons are mostly influenced by those who purify the blood, or put fresh vitality into the nerves. I may say, moreover, that all quack systems, as well as the worst methods within that pale of orthodoxy, proceed upon the plan of treating symptoms. The more closely a medical man adopts this method, wittingly or not, the nearer does he approach the charlatan. If what I have been saying be true, that changes in the body come about slowly and insidiously, our duty is rather to study how to check their progress, and not to devote ourselves to the treatment of the mere phenomena of the disorder.

On the Presence of Amylic Alcohol in Chloroform.

In the *Union Pharmaceutique* attention is drawn, by M. Hardy, to the presence of amylic alcohol in chloroform. By the process usually employed to rectify chloroform, namely, that of fractional distillation, the amylic alcohol is found to accumulate in the less volatile portions, and when large quantities are distilled the evidence of its presence becomes very decided in respect to smell. The author is inclined to attribute the presence of this alcohol in chloroform to the contaminated ethylic alcohol used, but he hints at the possibility that it is a secondary product in the reaction by which chloroform is produced. Comparative experiments were made with rectified and unrectified chloroform, by evaporating a quantity of each on bibulous paper. Neither specimen left any visible stain, but the second left a persistent odor of amylic alcohol, which was not to be

detected in the case of the first. Mr. Hardy attributes the nauseous odor which remains on the compresses which have been employed in the medicinal application of chloroform, to the presence of the small quantities of amylic alcohol above referred to.

Historical Note on Cæsarean Section.

From some researches of Dr. RODENSTEIN, that Pliny is responsible for the tradition that Cæsar "was from his mother's womb untimely ripped," Pliny remarks, difficult labors are of bad omen. Footling presentations are peculiarly unlucky. But those children whose birth has cost the mother her life are evidently born under favorable auspices. For such was the case with the first Scipio Africanus; "Primusque Cæsarum a cæso matris utero dictus; qua de causa et Cæsones appellati." In the preceding chapter he had stated that difficult labors are disastrous to the child and to mankind. He derives the name of Agrippa from "Ægre partus," and refers to the sufferings of Agrippa from the infidelities of his wife, and to the cruelty of Nero, who was born of Agrippina, as the proof of his statement; and, by a pun almost as execrable, he illustrates his opinion that hysterotomy is a happy augury to the child, because Cæsar was cut from his mother's womb. Other writers, however, tell us that the name of this illustrious Roman had nothing to do with his birth. Festus derives it from Cæsaries, and says he was surnamed Cæsar because he had a very heavy head of hair. Others say that the name of Cæsar is derived from a Punic word, which signifies elephant; and that the first of the Cæsars was so called because he kept an elephant.

Whatever may be the meaning of the word, the historical accuracy of Pliny cannot be questioned. He assures us that at Saguntum a child returned to the womb of its mother after its birth; that Alcippe was delivered of an elephant; that in Thessaly a hippocentaur was born of a woman; that he himself saw one brought from Egypt preserved in honey. After this, we are quite prepared to believe that Cæsar was cut from the womb of his mother.

Chloral and Its Administration.

The disagreeable sensation produced in the throat by chloral, and the difficulty experienced in getting some patients to swallow the substance in its usually nauseous form, have induced Mr. S. LIMOUSIN to experiment on a new method of administering it, *i. e.*, in the form of capsules with a gelatinous or saccharine envelope. His process is published in the *Journal de Pharmacie et de Chimie*. Although it is easier to introduce the chloral into capsules of soft gelatine, yet it is necessary to use the hard, because the former induce too rapid decomposition. Medical testimony shows that chloral administered in this manner has its full effect, and can be swallowed without any sense of irritation in the throat. Moreover, if the chloral employed in making these capsules is in any respect impure, if it has not been redistilled, if it contains free hydrochloric acid or an excess of moisture, the gelatine is rapidly attached and the capsule destroyed, incontestable evidence being thus offered of the condition of the chloral.

The Preservation of Hydrocyanic Acid.

In the *Bulletin de la Societe Chimique* M. Petit communicated the results of his experiments on the preservation of Hydrocyanic acid when diluted to one tenth and one thousandth. The acid diluted to one tenth alters very rapidly, while the acid of one thousandth, free or combined, when examined after six months, had preserved almost exactly its original standard. Still further, by diluting to one thousandth the acid of one tenth, which had already undergone a marked change, the decomposition was arrested. The presence of ammonia does not seem to induce this change. M. Gautier recalled to mind that in his own experiments, on very concentrated hydrocyanic acid, the presence of ammonia always hastened the decomposition. M. Fordos remarked that medicinal hydrocyanic acid apparently undergoes no change, that it does not become discolored; that, however, it disappears entirely after a certain time, this result being due, probably, to a simple evaporation, the flasks never being hermetically sealed.

Reviews and Book Notices.

NOTES ON BOOKS.

——A pamphlet of 53 pages, entitled *Aiken and its Climate*, by Drs. AMORY COFFIN and W. H. GEDDINGS, gives a concise and comprehensive sketch of this popular health resort, on the healthy highlands of South Carolina. It should be consulted by those proposing a winter in a milder climate than our Northern States possess.

——*The Transactions of the Sixth Annual Meeting of the Medical Association of the State of Missouri* form a pamphlet of 73 pages. Besides the minutes of the meeting, it contains several articles by members, most of which, however, have already appeared in various medical journals. The Society is in a flourishing condition, and numbers about 70 members.

——*The Proceedings of the Nebraska State Medical Society*, at its fourth annual session, held last June, are printed in pamphlet form (pages 40). The minutes, the address of the

President, Dr. R. R. Livingston, and some short communications by members, occupy most of the space. Dr. Coffman contributes a case of puerperal mania, the treatment of which merits criticism. He says he considered it an inflammatory condition, and *therefore* bled. This *therefore* is about fifty years behind the pathology of to-day.

BOOK NOTICES.

The Transactions of the American Medical Association. Instituted 1847. Vol. XXIII. Philadelphia, printed for the Association, 1872. 1 vol., cloth, 8vo, pp. 757, 94.

This bulky volume ought to contain a great deal of permanent interest and solid instruction in medical science. We shall endeavor to give a brief mention, at least, of its contributions in that direction. After the minutes, the address of Dr. D. W. Yandell, the President, is the first article. Its tone and teachings are little in consonance with the Report of the Committee on Medical Education, which immediately follows it. These latter gentlemen bewail the deficient elementary education of medical students, and the superficial training of many medical schools; but the sanguine President thinks that skilled surgeons and diagnosticians can be found at every crossroads, and that any knowledge about "chopping logic" and dead languages are at least wholly superfluous to men who are going to make their money chopping legs and exploring dead subjects. For the Association to sail under the banner thus exultingly raised in favor of ignorance will be found a severe task. It is not to be wondered at that the Committee on Medical Education report in an uncommonly gloomy and cheerless state of mind.

The Committee on Medical Literature give a list of recent medical publications, tolerably (not fully) complete, and close their labors with some admonitions to medical journalists. It is singular how often an editor meets a man ready to tell him how to get out a better journal. What the committee complain of is—first, the tendency to report successful cases only; secondly, the introduction of new plans of treatment by individuals; and thirdly, reporting cases from memory. We commend their advice to our contributors—and also to the American Medical Association's Publishing Committee.

The Section on Practical Medicine and Obstetrics publish a well-drawn scheme by Dr. E. Seguin, on the use of fever and surface thermometers, with a form for a clinical chart adapted to three weeks' observations.

The labors of the Section on Medical Jurisprudence, Hygiene and Physiology, are represented by two papers. The first is on the Structure of the White Blood Corpuscles, by Dr. Joseph G. Richardson, and contains the details and results of a number of experiments by that gentleman, having for their object the right understanding of the peculiar molecular movements of the corpuscles, the laws by which they take up fluids, and the character of the cell walls. While interesting new facts are brought out on these topics, a decisive conclusion is not reached. The second paper is by Dr. Henry Hartshorne, on Vaso-motor Physiology, more especially on the function of the unstriped muscular fibres of the smaller arteries. This tissue, in his opinion, largely carries on the circulation by its rhythmical contractions.

In the Section on Materia Medica and Chemistry, Dr. Ephraim Cutter presented a report on the Production of Vaccine Virus in the United States. His conclusion is that virus from the cow—"non-humanized virus"—has no superiority over the carefully selected humanized virus in common use.

On Medical Topography, Meteorology and Epidemics, there are reports on West Virginia, by Dr. E. A. Hildreth; on South Carolina, by Dr. Manning Simons; on California, by Dr. F. W. Hatch; on Delaware, by Dr. L. P. Bush; on Arkansas, by Dr. G. W. Lawrence; on Pennsylvania, by Dr. W. L. Wells; on Minnesota, by Dr. W. W. Sweney; and on New Jersey, by E. M. Hunt.

The Committee on Surgery and Anatomy print a careful review of the recent improvements in the operations for cataract, by Dr. H. Knapp; a case of vesical calculi with polypi of the prostate gland, by Dr. W. H. Mussey; a case of osteo-encephaloid cancer, apparently cured by electrolysis, by the same; an instance of the removal of the upper portion of the left femur for disease of the hip joint, by Dr. W. F. Peck; some valuable remarks upon the soft palate and adjacent parts in health and disease, by Dr. Harrison Allen; and the principles involved in the treatment of fractures of the extremities with the starch bandage, by Dr. Charles N. Hewitt.

The Report on Medical Necrology has been prepared with attention by Dr. J. D. Jackson, of Kentucky.

The Prize Essay is a highly interesting, and, we may add, a practically, clinically useful study of phosphorus as an organismal element, by Dr. Samuel R. Percy, Professor of Materia Medica in the New York Medical College. Dr. Percy has succeeded in preparing a phosphoric alkaloid, a nitrogenous hypophosphite, physiologically identical, he thinks, or at least strongly resembling, chemically, the alkaloid phosphorus of the brain, and hence exactly adapted for therapeutic purposes. He details a number of "successful cases" of disease in which he tried it, in all with decided benefit (we suppose the Publishing Committee asked him about his possibly unsuccessful ones, as we are informed medical journalists ought to do). The new Nomenclature is added to the volume.

It would be unfair to close this review of the *Transactions* without recognizing the very efficient services of the Permanent Secretary of the Association, Dr. William B. Atkinson, of this city. To him, more than to any other member, is due the judicious arrangement, the correct typography, and the prompt appearance of the work before us. No one is more fully identified with the history and interests of the Association, nor better qualified to execute efficiently the important duties which attach to his post, than Dr. Atkinson, and any society is fortunate who secures such an officer.

Ovarian Tumors: their Pathology, Diagnosis, and Treatment, especially by Ovariotomy. By E. Randolph Peaslee, M. D., LL. D., Professor of Gynæcology in the Medical Department of Dartmouth College, etc. With fifty-six illustrations on wood. New York, D. Appleton & Co., 1872. 1 vol., cloth, 8vo, pp. 551.

Dr. Peaslee's book covers a broader field than the work of Dr. Atlee, noticed in a recent number of this journal. It intends to embrace the whole ground indicated by the title, within the limits of a single volume, yet thoroughly enough to satisfy the wants of the student. As a useful preliminary to such an undertaking, a bibliography of the subject is prefixed, commencing with Aristotle and bringing it down to 1871. We may safely say that no treatise of importance has been omitted in this catalogue.

The work itself is divided into two parts. The first includes the normal anatomy of the ovary, and the pathological anatomy, the pathology, diagnosis, and treatment of ovarian tumors, excepting by ovariotomy. The second part is devoted to ovariotomy alone, including its history, statistics, practical details, and after-treatment. It embraces not only a pretty full history of the author's own extended experience, but a judicious summary of that of the other eminent operators in this field.

The first chapter of the second part is given to the history and progress of ovariotomy. The claims of Dr. Ephraim McDowell, of Kentucky, to priority in the operation are established by the author beyond reasonable question, and Dr. McDowell's original report of three cases is given as it appeared in the *Eclectic Repertory* for October, 1816. The term "ovariotomy," first proposed by Sir James Y. Simpson, is severely criticised by the author, who suggests in place of it the more correct expression Oophorectomy. In this, however, we cannot sympathize with him. A term generally adopted by the profession and sanctioned by long usage ought not to be discarded on exegetical grounds merely.

The volume is accompanied by an excellent index, and is printed on handsome toned paper, in clear type. The illustrations are clear and carefully executed.

Small-pox; the Predisposing Conditions and their Preventives. With a Scientific Exposition of Vaccination. By Dr. Carl Both. Second Edition. Boston, Alexander Moore, 1872. 8vo. Price 75 cents.

We expressed our views about this work when the first edition appeared, and although we have read with care the Appendix added to the present edition, in which the author expresses himself with bitterness about the criticisms he has received in Medical Journals, we have not seen reason to change our views. Dr. Both, in brief, opposes and denounces vaccination, and in place of it recommends the "use of *salt*, as the most certain preventive of small-pox." If he fails to show good grounds for our accepting this dictum, he does give ample reason for his pique against scientific medical journals, for he tells us that they have not given him credit for his greatest discoveries, they have criticised his books, yes, they have *refused his articles!*

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 2, 1872.

S. W. BUTLER, M. D., D G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE UNIVERSITY HOSPITAL.

We are glad to learn that the fund for the establishment of a Hospital, in connection with the University of Pennsylvania, is steadily increasing, and that its erection is now an assured fact. The business and professional men throughout the State, as well as in the City, have responded nobly, and yet $40,000 is needed at once. Corporations and manufacturing companies recognizing its value, not only to their own employees, but to the world at large, in a scientific point of view, have given of their abundant means for the endowment of free beds, but there is yet room for those of more limited circumstances, who feel it to be both a pleasure and duty to assist in this work.

The want is more pressing, in view of the fact that should the United States Government demand the present building in the Spring, prompt and efficient work will be necessary to complete the Hospital in time for next winter's lectures.

We would especially call the attention of the Alumni of the University to the fact that one ward is to be established to be known as the "Alumni Ward," and toward the endowment of which it is hoped that every graduate will send at least a small donation. A goodly sum has already been raised, but we know that there are many practitioners in the country who could very readily spare $10 a year for five years, a method of giving which has been adopted by the Executive Committee, and has given an opportunity to many who would not be able to send $50 at one time. We append a few statements of the Executive Committee, which will be read with interest by all:—

The growth of our State entails a demand for increased hospital accommodation, since a large part of the vast population is occupied in the dangerous pursuits of mining and manufactures, and the rural districts being entirely devoid of hospitals, the three and a half millions of people are forced to seek relief in the cities, and to be dependent upon about two thousand hospital beds.

Further, of these beds, the larger part are either not free, or else are in almshouses, into which the artisan classes will not enter when temporarily disabled, so that, in fact, there are only five hundred available free beds, giving a *per capita of one for seven thousand*, and that in a State whose wealth is 3,808,340,000 of dollars. These facts become, perhaps, more startling when it is borne in mind that there are, or will be shortly, in New York City over six thousand free hospital beds, giving a *per capita of one to one hundred and fifty*.

In order to secure the legislative grant so as to commence building, it is very desirable that the remaining seventy-five thousand dollars be speedily raised. This sum will, however, only serve to establish a portion of the proposed hospital, since, in order to carry out the intention of the Trustees of endowing a hospital with two hundred free beds, it is absolutely necessary that *at least* $700,000 should be subscribed.

The urgency and superiority of the claims of the University Hospital are demonstrated by the following reasons:—

1. The hospital will be a State institution, and not a local charity.

2. It will be absolutely free from any sectarian basis.

3. The site chosen, being elevated, healthy,

and *in the railroad centre of the State and city*, is the best that could be selected.

4. The management will be confided to a committee of eminent business men and *medical* gentlemen, which will afford that union of diverse talent and knowledge so requisite in the direction of a hospital.

5. The charity will be most judicious and liberal, because the hospital will be so closely connected with the medical school, that the reputation of the latter will largely depend upon the model character of the former. It is, therefore, evident that the highest obtainable technical skill will be directed, not only by educated benevolence, but also by self-interest, to develop the highest possible efficiency in the cure of disease and the material comfort of the patients.

6. The future prosperity of the Medical Department of the University of Pennsylvania, which has brought to Philadelphia (through the expenditures of its students) directly over twenty-five millions of dollars, and indirectly a much larger sum, and has long been recognized in Europe as the chief centre of American Medical Science, is immediately dependent upon the success of the movement.

7. Future generations of physicians will be better qualified for their responsible duties in consequence of the superior opportunities afforded for thorough practical instruction by personal contact with disease during their period of study.

8. The immediate success of the enterprise will be guaranteed before the subscriptions will be called in.

9. The patients are *waiting* for entrance; OVER FOUR THOUSAND HAVING APPLIED DURING THE PAST YEAR TO THE UNIVERSITY FOR RELIEF, coming often from the most distant hamlets of the State.

The cost of maintenance of a free hospital bed has been demonstrated by experience to be $300 per annum, requiring an invested endowment of $5000. Whilst even the smallest subscriptions are solicited, it is earnestly desired that wealthy individuals, firms, or corporations should endow free beds, which shall be at their disposal, affording them the means of providing for their employés and dependents when disabled. These beds will be known by the names of their donors, and, on average, each will give relief to twelve patients yearly. It is evident that in no other way can the same amount of material charity be obtained for the same sum of money.

We would suggest to our fellow-practitioners throughout the State that they call the attention of their wealthy patients to this matter, for we know that the University has many friends, not only among the graduates of its Academical, Law, and Medical Departments, but also in the community at large.

Contributions sent to this office will be gladly acknowledged and forwarded to the Treasurer, SAUNDERS LEWIS, No. 235 South Front Street, Philadelphia.

THE IMPORTANCE OF THEORETICAL IDEAS TO PRACTICAL MEDICINE.

Last year a most attractive collection of medical essays was published in Paris, entitled, *La Medecine et les Medicins*. The author was the venerable M. LITTRÉ, eminent as a lexicographer and linguist, and though not a graduate of a medical school, yet an ardent student of medicine in early life, and well known to scholars in our profession by his excellent translation of Hippocrates.

For half a century he has watched with an observant eye, and with the unbiased judgment of a spectator, the progress of our science; and his conclusions, therefore, have a weight which hardly those of the most eminent active worker can command; for he who is in the thick of the struggle is too interested an actor to speak impartially.

In the introduction to his work, M. LITTRÉ, after a slight sketch of his own medical studies, which included several years as an *interne*, under the most distinguished teachers of that day, recognizes the remarkable progress of the science since then, and inquires to what this is owing. His conclusion is interesting. He attributes it almost entirely to a radical change in the theoretical view of disease which took place about forty years ago. Previous to that time disease was regarded as an entity quite diverse in nature from health, a foreign

something, *alienum aliquid*, which crept in or superimposed itself upon the healthy functions. To purge the blood of this perilous stuff, to neutralize, and drive it out, was then the aim of the physician. It was but the old idea, in a scientific mask, of a devil which was to be cast out, if no longer with exorcisms and beating of tom-toms, then with drugs and the lancet.

At the time of which we speak there was a general rejection of this view, and in place of it the correct theory was adopted, that disease merely means disordered function; that no foreign entity is present, but simply an absence of functional harmony. No fancied foe is therefore to be attacked and driven off, but simply a judicious use of means is required to restore irregular action, just as we set about arranging any piece of delicate machinery which does not work to our satisfaction.

The physicians of that epoch, however, fell into a grave, though a natural error, when they came to formulate the nature of disease under this new law. Feeling the bounding pulse, the violent action, the flushed cheek, and the rapid breathing of the patient, they concluded that all these signs indicated excessive power of function, stimulated vitality. Their error was recognized a score of years later by a few, and is now acknowledged by nearly all scientific teachers.

A discourse on the advance of medicine in the last decade, lately read before the Medical Association of the State of Missouri, by our esteemed contributor, Dr. J. P. CHESNEY, states forcibly and in a few words how salutary this theoretical consideration has proved. He says:—

"Underlying the whole fabric of recent progress in medical practice, we find the great and thorough revolution as to our ideas of *life*, and the better practice based thereon. These ideas have for their basis the logical conclusion that all phenomena connected with vital organization, which are recognized as a departure from health, are, and must of necessity be, *retrograde* in their nature. The former notion that there was such a condition as an *over*-exalted vitality, leading often to disease and death, finds few supporters among intelligent physicians of to-day. What can be more paradoxical than an idea which will claim that a man's health has grown so good that it will make him sick? I believe that the medical world now fully comprehends the truth that *diminished vitality* is the essential condition precedent to all morbid action in the living economy; and that therapeutics based upon that hypothesis will always give the most satisfactory results. I believe RESTORATIVE MEDICINE is fundamental to all logical practice; and I do not wish to see the day when this idea will give place to the brilliant speculations of some new philosophy. The simple phrase, "Renewal of Life," carries with it more of good to the human family than the terminology of all the medical lexicons in existence twenty years ago."

The justice of these remarks will not be questioned by any who reflect how all-powerful in directing research and practice are the beliefs we cherish as to the nature of diseased actions, and what we figure to ourselves we are going to do when we give a sick man a dose of medicine. Perhaps it would do us good to make a habit of recalling to our minds that we do not administer the drug to "drive out a humor," or to neutralize a poison, nor yet to reduce the apparently excessive vital force we witness, but to sustain and support deficient chemico-vital processes.

SOCIETY DESPOTISM.

We have had occasion several times recently, to animadvert on the subject of the despotism of medical societies as it has been manifested in different sections of the country. A correspondent in another column calls attention to a glaring case of the kind in Hudson County, New Jersey, where some of the oldest and most respectable practitioners of medicine in the county have been called to account in order to gratify the jealousies and whims of a few members of the County Society. Having taken a good deal of pains to inform ourselves on the subject,

we are satisfied that no good reason ever existed for the treatment shown by some of the members of the Society to a respectable practitioner of that county. For presuming to publish articles from his pen, the Society, through one of its officers, made a personal attack on the senior editor of this journal last year, through the pages of a New York journal, which very discourteously lent them for the purpose. Severe illness prevented notice being taken of the circumstance at the time, as well as of some fresh outrages on respectable members of which the Society had been guilty. Such a course as that pursued by the members of this Society cannot be defended on any principles of justice or equity, and, indeed, they have entirely failed to defend their conduct before the courts of justice of the State. Such conduct, too, does great injury to the cause of medicine in the locality in which it occurs.

Notes and Comments.

Correction.

In our obituary notice of the late Dr. John Bell (No. 810) we inadvertently associated Dr. Hiram Corson as a member of the club to which Dr. Bell belonged. This was erroneous, as Dr. Corson belongs to a younger generation of physicians.

Native Deposit of Glauber Salt.

Noeschel has discovered a deposit of native glauber salt in the Caucasus. This singular deposit is on the right side of the Jover, some three or four wersts (Russian miles) from the high and steep river bank, near the military settlement of Muchrevan, 20 or 25 wersts from Tiflis, and 10 wersts from the German colony of Marienfeld. The spot where it is found is a bowl-shaped depression, half a square werst in extent, 60 feet deep, destitute of vegetation, and surrounded by wave shaped hills, except on the west side, where the metoric water can flow off. A boring gave the following result: Marl, 1 foot; gray moist clay, 2.5 feet; dark gray, bituminous, salty clay, 0.7 feet; pure glauber salt, 5 feet.

It is probable that the thickness of this wonderful stock of salt is very much greater. Three other borings at distances of 60 to 80 fathoms gave the same result, and Noeschel estimates the total amount at not less than fifteen and a half million cubic feet.

Pennsylvania Hospital.

The managers of the Pennsylvania Hospital being desirous of extending its benefits to a large class who, although requiring medical aid, for which they cannot afford to pay, do not really need admission into a hospital, have determined to open a department for out patients, in which those making application will receive the necessary medical advice or surgical treatment. The managers, at their stated meeting on the 28th ult., elected the following physicians and surgeons to take charge of out patients, viz:—Physicians, Drs. Morris Longstreet, Joseph G. Richardson, and Joseph J. Kirkbride. Surgeons, Drs. Charles T. Hunter, Thomas H. Andrews, Elliott Richardson, and H. Earnest Goodman. This department is now open at the hospital, on Eighth street below Spruce, daily (Sundays excepted) from ten to eleven A. M.

Strychnia in Typhoid Fever.

Dr. F. R. Millard, of Beetown, Wis., writes us:—

I am not aware that strychnia, or nux vomica is used in typhoid fever; but having witnessed its curative action in dysentery, I was induced to give it a trial, and am satisfied that it is one of the best remedies we possess for supporting the patient and restraining the excessive action of the bowels. I seldom give more than one grain of extract nux vomica at a dose, repeated every four to six or eight hours, generally combined with opium. Either opium and ext. nux vomica āā; or, opium one part, and ext. nux vomica two parts. I think that if my professional brethren will give it a trial, they will find it generally superior to quinine (in cases not decidedly complicated with malaria), not only in dysentery, but typhoid fever also.

Snakes in the Stomach Again.

In the proceedings of the Vermont State Medical Society, published in this number of the Reporter, a snake story is found. We always suspect fraud in these cases, and are very slow to give credit to any other explanation of them.

Overtasking Children.

In reference to our late editorial on "The Labor Question in one of its Sanitary Aspects," Dr. T. J. Hutton, of Shenandoah, Pa., calls attention to the injurious effects of overtasking children in the coal mines of this State. He says:—

"What shall we say of the thousands of children, from six to eight years of age, employed in and around our coal mines? Ere they have cut their primary teeth, or given shape to their plastic bones, or fully evinced their self-existence, they are subjected to undue exercise and confinement, and to noxious gases impregnated with the seeds of disease and death. While they are utterly helpless, unable to speak for themselves and to vindicate their rights, who shall be the Graham to propose the needed legislation in their behalf?"

We hope a much needed reform in this direction will be inaugurated at the next meeting of the State Medical Society.

Treatment of Diabetes.

Professor Cantani says: 1. In diabetes mellitus there takes place the formation of a special kind of glucose, which might be called paraglucose. 2. All diabetes mellitus essentially is due to a diet containing amylaceous and sugary matters. 3. Every diabetic organism which is forced, by means of an exclusive meat diet, no longer to form paraglucose, ought finally to recover.

He believes that in healthy individuals there is true glucose in the blood, but in diabetes there is a false glucose, which is but little oxidable, and passes out of the system just as quinine, iodide of potassium, etc., does.

Dr. Primavera contests the idea that we daily introduce much glucose into the organism, even when we eat much starch or sugar. What goes into the blood is not true glucose, says he, except in very small quantities. All the rest, which enters by the vena portæ and through the liver, is there transformed in two ways. It must, therefore, be looked on as a kind of peptone. He remarks that in every diabetic patient there are two stages; the first always ceases when amylaceous or sugary foods are suppressed, and in the second the cessation of such diet does not entirely cause a stoppage of the diabetes mellitus.

Dr. Balfour, of Edinburg, relates cases of complete cure from the use of Cantani's method (a strictly animal diet, where from one to two pounds of meat a day are used, and from one to four spoonfuls of lactic acid are given to drink in a cup of water occasionally).

How to Treat Melancholia.

In the pages of a German cotemporary, a writer, Dr. Mendel, maintains that it is a mistake to treat melancholy by means of concerts, society, theatres, and the like. It is caused by hyperæsthesia of the brain, and requires rest from all kinds of excitement. The patient should reside in some very quiet and retired country place. This often produces a rapid cure, and sleep returns to the patient, who has long suffered from insomnia. Warm baths are also to be recommended. A great proportion of such cases get well spontaneously, and do not require any medicine internally. The use of morphia subcutaneously injected, however, is sometimes indicated. Dr. Mendel speaks very highly also of chloral when a temporary sedative is required, since it is much quicker in its operation than morphia injection. The author has found in many cases of chronic melancholy thickening of the pia mater, combined with hyperæmia of the brain. In many cases where morphia injection is useful, symptoms of pressure have been remarked by the author, such as slight paresis of the facial nerve, deviation of the tongue, of the uvula, and difference in the size of the pupils.

Opium Culture in Tennessee.

In a paper read at the late meeting of the American Pharmaceutical Association, Mr. Lillard stated that imported seed was planted in the spring of 1871, with good success, large and vigorous plants being the result, while the flowers and capsules were unusually large. The seed is sown about the same time as oats, in soil prepared as for cotton. It is planted in drills; the young plants are thinned out to from four to six inches apart, and cultivated similarly to cotton. Soon after the flowers drop off (this year it occurred in June), the capsules are cut horizontally, *on one side*, early in the morning. (The knife used resembles a cupping lancet.) The milky exudation coagulates rapidly, becoming first pale red, and then a rich brown soft mass. The next morning it is scraped off and dried in the sun, and the following morning the other side of the capsule is similarly scarified.

Treatment of Chronic Bronchitis.

At a late clinic, referring to a stout phlegmatic woman of middle age, who had been admitted for chronic bronchitis, Dr. FULLER remarked that in these cases treatment by expectorants alone is often useless. The catarrhal state of the bronchi is frequently merely a symptom of systemic plethora, or of an unhealthy state of the secretions generally; the bronchitic irritation being of a reflex character. The so-called "asthmatical" patient usually suffers from more or less dyspepsia, accompanied by a torpid liver and sluggish or irregular bowels. In such cases, no impression can be made on the chronic bronchitis until the diet has been carefully regulated, the allowance of stimulants restricted, and the abdominal organs relieved by some alterative aperient; indeed, in many cases these means are sufficient, without any special treatment of the local ailment, for which alone the patient sought advice.

Lexicography of the Horse Disease.

An extensive vocabulary has suddenly arisen in connection with the horse disease. It is variously called Horse influenza, Epihippic, Hippozymotic, Hippozootic, Hippo Grippe, Catarrhal fever, Typhoid Laryngitis, Lung fever, Hippo-malaria, Epyzooty, Equine influenza, Hippic distemper and Equine catarrhal affection. Out of this assortment, Philohippics may select the correct term.

Effect of Sewer Gas.

Investigation into the probable cause of the sickness which has just caused the closing of the Rhode Island conference seminary, at Greenwich, R. I., has resulted in the discovery of a leak in the sewer, in the rear of a boarding house, caused by rats, by which a portion of the sink drainage was deposited under the rear of the house.

Notice—Commutations.

Owing to some confusion in the business affairs of the office last spring, several subscribers who had sent us money for other journals were not attended to as they should have been. We therefore request all who have not received journals for which they had subscribed through us, to communicate with us in order that their claims can be satisfied.

CORRESPONDENCE.

Society Despotism—District Medical Society of Hudson County, N. J.

EDS. MED. AND SURG. REPORTER:—

A few days ago a novel exhibition was presented in the District Medical Society of Hudson County, New Jersey. It was nothing less than the expulsion of twelve of the members by about twenty of their medical brethren. The crime alleged against those expelled was membership in the Hudson County Pathological Society. This was an association of physicians, regular and well educated, whose object in meeting together was their mutual improvement in the sciences of pathology and medicine. They had adopted a constitution identical in almost every respect with that of a similar organization in the City of New York; they had obtained a charter from the State Legislature, and had been represented by delegates at the last meeting of the American Medical Association in Philadelphia, the only meeting since their organization. In their list of honorary members were some names well known and honored throughout the country. Among the active members, besides the members of the District Society, were a number of respectable physicians from neighboring counties, one of them a late president of the Medical Society of New Jersey. Among them, however, was a physician who, though regular and well educated, had three years ago been denied admission to the District Medical Society of Hudson County. The alleged ground for his rejection was some not very important breach of the code of medical ethics. There are many who believe that motives less worthy than the wish to elevate the standard of professional etiquette were at work, and that professional jealousy had much to do with his rejection. Twelve members, at least, of the Society, could not see that there was any disgrace in being members of a Society of which a rejected applicant to the Hudson County Society was also a member. This was the crime for which they were expelled, and proclaimed before the medical public outcasts and unworthy of confidence.

It may be worth while to publish the particulars of this farce somewhat in detail, both as an act of justice to those whom an attempt has been made to injure, and to show how a few unscrupulous medical wire-pullers can make use of the machinery of a District Medical Society to accomplish their own selfish purposes.

You may remember, Messrs. Editors, that a few years ago you received a peremptory order from three or four of your subscribers, physi

cians of Hudson County, to "*stop their paper.*" The reason assigned for this serious demonstration was their discovery of something in one of the articles recently published by you, which, from their elevated stand-point, seemed "immoral." The article in question was a communication from a surgeon, giving an account of an operation performed by himself. You were somewhat surprised that the immorality of the communication should have entirely escaped your notice, as well as that of all your subscribers, with the exception of the four virtuous physicians of Hudson County. Upon referring to your list of subscribers, you discovered that the exemplary four were the immediate neighbors of the surgeon who was the author of the article, and the suspicion very naturally arose in your mind, that professional jealousy, and not a high regard for morality, prompted the indignation of these medical Pecksniffs.

It may give a clue to the motives which actuated the Hudson County Medical Society in their late exploit, to state that these four physicians, with a few other kindred spirits, are the very individuals who are accused of constituting a clique who manipulate the Hudson County Medical Society for their own purposes; and that the aspiring surgeon who was the author of the article to which we have alluded was also the one denied admission to their society, and the especial object of their benevolent discipline. This gentleman, wishing the recognition which the District Medical Society is bound to afford to all regular physicians within its limits, while asserting his innocence of any intentional violation of the code of ethics, nevertheless expressed a willingness to remain any reasonable length of time on probation out of the Society, providing he might then be admitted, if his conduct in the meantime had been deemed irreproachable. Though space for repentance has generally been supposed to be the privilege of every one, such was not accorded him. He was refused permission even to apply again for admission until a year should elapse.

It next happened, in the course of events, that the rejected applicant became a member of a hospital staff, composed entirely, with this exception, of members of the District Society. The controlling clique in the Society, extending the theory of contagion from pathology to medical ethics, assumed that the whole staff would become contaminated by the presence of one outside of their own particular medical fold, and called upon them to resign their positions in the hospital. The staff denied the justice of such a demand, and refused to accede to it. For this reason, and this alone, they were brought to a formal trial before the Society, upon the charge of "immoral and unprofessional conduct in serving upon the hospital staff." If this wonderful trial could be published to the world in all its details, Macaulay's Trial of Warren Hastings would probably be at once forgotten. A specimen brick must answer for the whole structure. The presiding officer, for a part of the time at least, was one who had signalized his advent to Hudson County by a copious distribution of handbills from door to door, announcing his rare qualifications for practice. The exquisite propriety of such a selection for a judge to decide points of medical etiquette, must be apparent. An injunction from the civil courts stopped all proceedings, and an appeal to the State Medical Society brought the decision that no just cause for action had been shown.

After the quiet rebuke from the State Society, it might be supposed that the Don Quixotes of the District Society would have afforded their jaded Rosinantes much needed rest. Like the punished boy, however, they blubbered "If I can't pinch my sister I will kick my little brother." Fifteen members of the District Society were also members of the Pathological Society to which belonged the great rejected. How to inflict punishment upon those fifteen, for their association, became the next problem. A three-fourths vote of the Society was required by the constitution, in order to inflict any punishment whatever. The controlling clique, even by the most approved methods of wire-pulling, could not hope for more than a majority for any such purpose. The only hope was in an amendment of the constitution. This was accomplished after many months of tedious labor by the virtuous few, at meetings when they were present with few others who suspected the design. The constitution was first amended so that a majority vote could expel. Next, so that all trials should be conducted before a star-chamber, composed of the clique, under the sonorous title of "comitia minora." The Society at large could judge only from their report, and must necessarily be guided by their decision. In case an appeal should be made to the State Society for redress, some comfort could be derived from the circumstance that one of the members of the "comitia," was also a member of the standing committee of that body, to which all cases of appeal, by a new arrangement, are hereafter to be referred. How much real ground there may be for such consolation, remains to be seen.

With a constitution thus tinkered, the "comitia" prepared for action. Fifteen of their medical brethren were summoned to appear in their august presence, to "explain their conduct in respect to their connection with an association called the "Hudson County Pathological Society." Inasmuch as the "comitia" could with just as much propriety request them to explain their conduct in respect to their connection with any church to which they happened to belong, the fifteen, with one or two weak-kneed exceptions, excused themselves from complying with the polite invitation. The indignant "comitia" decided that they were worthy of expulsion, and at a meeting of the District Society, when the accused had received no notice that their cases would be acted upon, when only those who had been privately in-

formed were aware of the design, when hardly more than a third of the members were present, and when no opportunity was afforded to one of the accused who happened to be present to defend himself, the expulsion took place.

Abundant proof can be furnished for all the particulars of this transaction, if any attempt should be made to deny them. The farce is designed, if it has any effect at all, to influence public opinion outside of Hudson County. Here the motive is well understood. It is the obstinate determination of a few to control for their own purposes the power associated with the name of District Medical Society. The late display of despotism was made with the hope of humbling a few who did not feel called upon to join the pack in howling at the heels of a single individual, whose claims to respect are certainly equal to those of many still in the fold of the District Medical Society of the County of Hudson. JUSTICE.

Stricture of Anus Cured by Immediate Dilatation.

EDS. MED. AND SURG. REPORTER:

In looking over some of my old cases I find one which occurred in 1859, which I think possesses some interest, and I transcribe it from my note book for you.

The case was a little boy, of A. S., in his fourth year. The child had difficult defecation from birth, which event transpired in Lancaster county, Pa., under the care of a very distinguished surgeon. As time wore on, the little patient fell under the notice of several physicians, and was subjected to Castor Oil, Senna and Manna, Calomel, etc., but without relief. As the child grew older, defecation became still more difficult. A day or two before I saw the little fellow, the family having removed to Ohio, he had eaten some cherries, with the seeds. Efforts were made, in my presence, to evacuate the bowels, and with terrible straining one of these seeds would be projected at a time, with nearly as much force and execution as a ball fired from a pop gun. The abdomen was distended till, in a sitting posture, it projected beyond the knees, and an offensive stench was emitted from the person. The smell resembled a much used and neglected privy.

Suspecting an obstruction of some kind in the rectum, I introduced my finger, and about an inch and a half from the anus I found a firm stricture, almost entirely occluding the bowel. Passing a small jawed nasal polypus forceps along my finger, I forced the jaws through the stricture, and opening them forcibly in several directions, I thoroughly broke up the obstruction. The patient immediately passed a large and offensive stool. In a few days the bowels were emptied, the abdomen assumed its normal size, and the child, to the satisfaction of the parents, was cured.

L. G. HARLEY, M. D.

Wooster, Ohio, Oct. 24, 1872.

NEWS AND MISCELLANY.

A Physician Sued for Malpractice and Acquitted.

The Winona (Minn.) *Republican*, Oct. 19, says:—The celebrated suit for $10,000 damages against Dr. Cross, of Rochester, for malpractice, in setting a boy's arm, has resulted in favor of the doctor, and the plaintiff has to pay the costs. The facts of the case briefly are that the boy was turning on a horizontal bar, fell and broke his wrist. Dr. Cross was called, and set the arm; called the next day and dressed it again, doing it up in permanent splints. When he called on the third or fourth day—there is a slight dispute as to the time—he found mortification setting in, and accordingly had to amputate the hand. The plaintiff claimed that the mortification had been occasioned by the bandage being too tight on the arm, thus stopping the circulation of the blood. The doctor's defence was that the injury to the wrist had obstructed the arteries, and was the cause of the mortification. The uniform testimony of the surgeons in attendance was that the operation had been performed in a skillful manner, and even the old physician of the family, who had been summoned from Wisconsin, gave the same opinion. Among the counsel for the defence was Matt. Carpenter, of Wisconsin. His address to the jury was very brief. Judge Barber and C. C. Wilson, Esq., appeared for the plaintiff.

Health of the City.

At this particular time the city of Philadelphia is in the enjoyment of extraordinary good health among its human inhabitants. The mortality lists published weekly by the Board of Health show a comparatively small number of deaths for a city with a population of seven hundred and fifty thousand. The deaths are about two hundred and fifty per week, or an annual average of sixteen in the thousand.

Cyclopean Relics.

At Sterling Run, Cameron county, Pa., recently, a number of human skeletons were exhumed, together with an earthen pot and stove-pipe, supposed to be of Indian manufacture. One of the skeletons measured seven feet seven inches in length, and the others were proportionally large.

A New University.

A new University is to be opened on November 1, at Klausenburg, the capital of Transylvania. The town already possesses a Medico-Chirurgical School, the teachers in which are to be the professors, in their respective subjects, in the faculty of Medicine.

Japanese Students.

At the last examination in anatomy which was held at the University of Berlin, two candidates alone, amongst the thirteen who presented themselves, obtained the notice "good". One of these was a Japanese medical student called Sasumi Satoo. The intellectual labor and the amount of perseverance necessary to gain this success will be appreciated, when it is known that in November, 1869, the time when Sasumi Satoo was sent by his father to Berlin, he did not even know the German characters. The first five months he applied himself exclusively to the study of German; and he acquired, in the remaining six months, the knowledge of all the subjects, including Latin, which were required for the first examination. The father of Sasumi is the principal physician to the Mikado, and enjoys, in Japan, great celebrity as an operator.

Death from Bichloride of Methylene.

A case of death from this new anæsthetic is reported from the Middlesex Hospital, London. The patient was a stout, middle-aged man, suffering from fistula in ano. He inhaled only two drachms, and suddenly died.

Dr. R. P. Markham, of East Longmeadow, Mass., who had been a great sufferer from hail, frost, and fire during the past three months, was surprised at his residence, on the twenty-fifth anniversary of his marriage, recently, by the visit of a crowd of friends, who presented to him a purse containing $1000, to aid in rebuilding his barn, and a valuable horse in place of one stolen some time since. His daughter and son also received handsome and valuable gifts.

The Medical Society of the County of New York held their sixty-seventh annual meeting on Monday evening, Oct. 28th, for the election of officers, with the following result:—For President, Dr. Ellsworth Eliot; Vice-President, Dr. Henry B. Sands; Recording Secretary, Alfred E. M. Purdy; Corresponding Secretary, Frederick A. Castle; Treasurer, Joseph E. Janvren.

Prof. Agassiz has been elected one of the eight foreign associate members of the French Academy of Sciences, to fill the vacancy caused by the death of Sir Roderick Murchison.

Introductory.—Professor Harrison Allen, M. D., delivered the introductory lecture to the regular course, at the Philadelphia Dental College, on Monday, Nov. 4.

Steamers for the Florida coast and the West Indies are crowded with invalids in search of winter sunbeams.

A female doctor in New York reports that she is treating four ladies suffering from the horse disease.

Dr. Cyon has been appointed Professor of Physiology in the Medico-Chirurgical Academy of St. Petersburg.

MARRIAGES.

Atkinson—Ewing.—Oct. 11, at the residence of the bride's parents, Hebron, Ohio, by Revs. T. W. Howe and A. S. Dudley, Joseph Alexander, Esq., of Pataskala, Ohio, and Miss Julia Churchill Ewing, only daughter of Dr. and Mrs. J. C. Ewing.

Battelson—Fletcher.—Oct. 19, by Rev. Dr. J. Millett, Rector Church of Holy Martyrs, at his residence, George Battelson, M. D., of Fairfield, Conn., and Emily, youngest daughter of the late Thomas Fletcher, Esq., of Southover, Sussex, England.

Cooper—Mears.—Oct. 23, by Friends' ceremony, Howard M. Cooper, of Camden, N. J., and Alice M., daughter of Dr. Benj. R. Mears, of Philadelphia.

Evans—Oliver.—By Rev. G. Dorsie, Oct. 1, at the residence of the bride's father, H. W. Oliver, Sr., Esq., Hazelwood, Pittsburg, Dr. C. Evans and Miss Maggie B. Oliver.

Lyon—Lescure.—At Middletown, Penna., Oct. 15, by Rev. A. D. Mitchell, of Harrisburg, Edward Lyon, M. D., of Williamsport, Pa., and Miss Mary J. Lescure, of Middletown.

Norris—Brown.—In this city, Oct. 24, at the Oxford Presbyterian Church, by Rev. Frank L. Robbins, Pastor, Dr. J. C. Norris and Mrs. Mary S., widow of the late Nathan Brown, and only daughter of the late James Irwin.

Strawbridge—Butler.—In Trenton, N. J., Oct. 10, at the residence of Thomas S. Murray, Esq., by Rev. Dr. A. Shiras, of Philadelphia, James D. Strawbridge, M. D., of Danville, Pa., and Ellen Virginia, youngest daughter of Steuben Butler, Esq., of Wilkesbarre, Pa.

Tice—Proudfit.—Oct. 2, at Sterling Valley, N.Y., by Rev. Amos C. Beach, D.D., Lewis Tice, M. D., of New York, and Miss H. Elizabeth Proudfit, daughter of the late Alexander Proudfit, of Sterling Valley.

Wilson—Murphey.—Oct. 17, in the Upper Octorara Church, by the Rev. J. J. Pomeroy, assisted by the Rev. James M. Crowell, D. D., Mr. William Wilson, of New York City, and Miss Kate Murphey, second daughter of Andrew Murphey, M.D., of Parkesburg, Pa.

DEATHS.

Andrews.—At Perth Amboy, N. J., Oct. 17, Solomon Andrews, M.D., in the 67th year of his age.

Henschel.—Charles Henschel, M. D., at Zurich, Switzerland, September 18. Late of New York City.

Irwin.—Oct. 16, James Hervey Irwin, M. D., at his late residence, No. 193 Broome street, New York, aged 46 years.

Kittredge.—In Glastonbury, Conn., at the residence of his son, Rev. J. E. Kittredge, Josiah Kittredge, M. D., late of Montclair, N. J., aged 79 years.

Richards.—At Orange, N. J., Oct. 28, Lucine Amelia, only daughter of Dr. George W. and Amelia Richards, aged 4 years and 8 months.

Stanton.—At New Brighton, Pa., Oct. 13, in the thirteenth year of his age, Charles W. Stanton, son of Lydia M. and the late Dr. David Stanton.

THE

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Original Department.

Communications.

THE MIND AND THE BODY.

By J. Ritter, M. D.,
Of Liverpool, Pa.
President of the Perry county Medical Society.

We purpose illustrating the modes in which the mind has a controlling influence over the body. This is produced through intellectual, or nervous sympathy. Sympathy is of a threefold kind. Intellectual, Natural, and Social. Dr. Burns, of Glasgow, says: "in the whole economy of nature we can see the wisdom of the *Creator*. But in no part more than in the sympathy of association; it does not only run through individuals, but, also through nations." But what is sympathy? It implies interest, a fellow feeling, affinity, etc. Natural Philosophy teaches, as the learned Webster has said, that there is a certain sympathy, a propension, in all nature, even in inanimate articles; hence the loadstone and iron, the magnetic needle, etc.; but in animate creation, intellectually, it is produced by thought; naturally and socially, through the nerves and affections. The nerves, according to medical pathology, are very essential to man, and have much to do with the nutritive system and reproduction, they are profusely scattered over the human system. The English schools teach that there are 49 pairs, and the French, that there are 52 pairs. These nerves are a general band, consisting of fine tapes or fibres, or, if you please, cords, containing a fine vital medulla fluid, through which organic impressions are made. They are said to be the intermediate link that connects the soul and body. Hence we are taught that man is a compound being, consisting of soul, body, and spirit.

The learned and eloquent Dr. B. Richardson, of London, beautifully shows that this gaseous, or vaporous atmosphere of vital nervous matter, is the spirit of man, and then explains his multifarious phenomena of organic life and mental activity. He also shows that they are subject to impression, not only from one kind of impulse, but from any kind to which it may be subjected, viz: calorific, mechanical, electrical, chemical, or to all causes of vibratory motions, etc. It is said by our Professors of Medicine, that it is the Ganglionic, the fifth, sixth, and eighth pairs, that connect directly with the viscera and great sympathetic nerves, which makes the direct impression on the conscious brain.

Hence, in contusion of the *brain*, the *stomach* is nauseated, and in case of dyspepsia, where the stomach is morbid, and the gastric and pancreatic juices do not harmonize and perform their proper part, there are sick headache and an irritable mind. These nerves anastomose. They are supplied by the *brain*, cerebellum, medulla, etc.

The muscles are conductors of sound (according to Prof. *Tallaposy*, of Paris), whilst the nerves are conductors of impressions by thought, a blow, touch, or affection. The *nerves* are strongly affected in cases of joy and prosperity, and in cases of sickness and adversity, until all the nerve centres become excited or prostrated, until tremors, mania, and not unfrequently suicide follows. Hence the importance of directing our thoughts and affec-

tions properly, and of bracing up every nerve to its proper capacity. Dr. Tuke has some lucid observations "on the influence of the mind upon the body," 1st. In the *Journal of Mental Science*, where he says, thought strongly directed to any part tends to increase its vascularity, and consequently its sensibility. Associated with a powerful emotion, these effects are more strikingly shown, and, when not directed to any special part, an excited emotional condition induces a general sensitiveness to impressions; an intolerance of noise, for example, or cutaneous irritation. 2d. Thought strongly directed away from any part, especially when this is occasioned by emotion, lessens its sensibility. The activity of the cerebral functions during deep intellectual operations excludes consciousness of the impressions made upon the sensory nerves generally, and an absorbing emotion effectually produces the same result. 3d. The motions may cause sensations, either by directly exciting the sensory ganglia and the central extremities of the nerves of sensation, or by inducing vascular changes in a certain part of the body, which changes excite the sensitive nerves at their peripheral terminations. 4th. There is no sensation, whether general or special, excited by agents acting upon the body from without, which cannot be excited also from within, by cerebral changes (including those associated with emotional excitement) affecting the sensory ganglia.

A CASE OF IDIOPATHIC TETANUS.

By William Ekwurzel, M. D.,
Of Frankford, Pa.

John S., aged 48, laborer, intemperate, a strong, hardy man, who, with the exception of two attacks of delirium tremens, had had no illness since he was a child, on September 12, after working hard in a brick yard, and feeling warm and tired, lay down under a brick shed and went to sleep, a fresh breeze playing over his body. When he awoke he felt chilled and stiff. The next day his bones ached, and he felt quite stiff about the neck, but would have worked if the weather had permitted. Worked on the 14th, and went to church on the 15th, still growing worse. On the 16th, feeling unable to leave the house, he sent for his physician (?), a homœopath, who applied mustard to the whole length of the spine *ad vesicationem*.

When I was called in on the 19th, just one week from the time he took his cold nap, I found him sitting in a rocking chair, with his head drawn firmly back against the chair back; all the muscles except those of the arms, tense and rigid. He was only able to separate the teeth to the extent of $\frac{1}{8}$ inch; articulation was consequently difficult, still he could make himself understood. The skin about the mouth seemed drawn tightly, and the corners of the mouth were retracted. The "sardonic grin" was well marked, but there was no decidedly anxious or distressed look about the face. Deglutition was somewhat painful, but not enough to interfere with the taking of nourishment. He said he was hungry, and avowed his ability to eat a "square meal" if he could only get it into his mouth to masticate it. The abdominal muscles were very tense and rigid, feeling like hard, unyielding boards; and a like rigidity pervaded the muscles of the neck, back, and lower extremities. As he was sitting, he could, with great difficulty, raise each foot a short distance from the floor, but was unable to stand or walk. At intervals of from five to ten minutes he was seized with severe spasms, attended with hurried respiration, and a straining groan during expiration, reminding me very much of a woman in labor. Indeed, his wife habitually spoke of the spasms as "pains," saying, for example, that when she attempted to give him anything it always brought on a "pain." He complained much of a severe and constant pain at the epigastrium, greatly intensified during the spasmodic seizures. The spasms were of short duration, lasting but two or three minutes. When they passed off, the perspiration stood in large drops upon his hands and face. They came on whenever the patient attempted to speak, or was spoken to or touched, and were attended with much pain. Inspection of the back revealed (as a result of the mild and humane efforts of homœopathy), a space about eight inches wide, extending from the base of the neck to the sacrum, burnt to a deep scarlet, and blistered in places. There was no derangement of the intellect; no headache; pupils normal; pulse 72, of good force and volume. The sphincters were under complete control.

Directed the patient to be placed in bed and kept perfectly quiet; to have as much beef tea and milk punch as he could be induced to swallow; and to take 20 grains of bromide of potassium every three hours. Before deciding

on the relative merits of chloroform, chloral, calabar bean and lobelia, I called on Dr. F. F. Cassaday, and requested him to see the case with me. At 3 P. M. we found the patient in about the same condition. Ordered a teaspoonful of the following mixture every hour and a half:—

℞—Tincturæ lobeliæ,
Tincturæ hyoscyami, āā ʒij. M.

Continue the bromide and nourishment.

Sept. 20th, 3 A. M. Called in haste, the messenger stating that the patient was much worse. On reaching the house I learned that he had had two severe spasms, each one lasting about ten minutes. The jaws were now firmly locked, the patient being unable to separate the teeth. When he was spoken to, or touched, he had spasms of short duration. All at once he went into a most violent opisthotonic spasm, which continued for ten minutes. The body was completely arched from the sacrum to the occiput, while the extended extremities were the seat of incessant trembling or twitching movements. Sitting with my hand resting on the bed, I found that the whole bed was thrown into vibration by the host of contracting muscles contending fiercely for the mastery over each other. When the spasm subsided, he complained greatly of the pain, and declared that he would have shot himself at the start, if he had known he had to suffer so much. I at once gave a double dose of the lobelia mixture, and gave chloroform by inhalation for twenty minutes, but did not bring him fully under its influence. Ordered whiskey to be freely given.

10 A. M. Saw patient in company with Dr. Cassaday. There had been no more severe spasms, but frequent light ones. No nausea. Gave a hypodermic injection of morphiæ sulph., gr. ¼, and directed that the lobelia be given every hour.

5 P. M. Had been nauseated, and vomited a little, after which he had slept occasionally, and felt comparatively comfortable. No more severe spasms. The bowels had not been moved since the 18th; breath extremely offensive. Ordered one of the following pills every three hours:—

℞—Ol tiglii, gtt. j.
Ext. jalapa, gr. vj.
Hydrarg. chlor. mit., gr. xij. M.
Ft. pil. No. iv.

21st, 3 A. M. Pulse irregular, running from 60 to 120 and back, within the space of a few minutes. Spasms light, but frequent; muttering delirium; carphologia; abdomen tympanitic. No effect from the pills. Ordered an enema; other treatment continued.

10 A. M. Meeting Dr. B. H. Deacon near the house, I invited him to see the patient with Dr. Cassaday and myself. The enema had been followed by a free evacuation. Pulse 72; teeth firmly clenched; spasms frequent, but not severe nor of long duration. The abdominal (and other) muscles were still rigid. Continue the lobelia, increase the bromide to 30 grains every two hours, and, to combat the tendency to depression, 24 grains of the sulphate of quinia in the twenty-four hours. Gave stringent orders regarding the administration of beef tea and whiskey, as there were grounds to fear that the treatment in this respect had not been faithfully carried out.

P. M. Resting with some comfort, but has occasional short spasms. Trismus unyielding; breath very offensive; carphologia persistent, with occasional muttering. On account of the typhoid condition into which the patient was apparently drifting, I discontinued the lobelia mixture. Other treatment continued.

22d, A. M. To prevent repetition, I will here state that Dr. Cassaday kindly saw the patient with me every morning, and gave me the benefit of his experience with the disease. The patient could now turn the head from side to side much more freely than heretofore; was also able to articulate more distinctly, and the face presented a more natural appearance. The abdominal muscles were somewhat softer, and began to play a little during respiration. The muscular rigidity was so great in the lower extremities that they were almost immovable. He complained much of severe pain in the hip and knee joints. At 5 P. M. on the preceding day, morphiæ sulph., gr. ¼, was given, on account of the frequently recurring spasms, and the great pain attending them. This had no appreciable effect, the spasms continuing with great frequency until 1 A. M., when they ceased in a great measure, and the patient enjoyed comparative quiet, with refreshing sleep, broken, however, by an occasional spasm. Treatment continued; also ordered chloroform ʒss in emulsion.

P. M. Spasms frequent, but short. The chloroform had had an exciting effect; directed ʒj to be given. The patient was continually

muttering to himself, and grasping at imaginary objects in the air.

23d, A. M. Abdominal muscles still softer; spasms farther apart; patient quiet. Had been in wild delirium during the night, talking incoherently about his work, and attempting to get out of bed. Discontinued the chloroform; continued quinia and bromide; also ordered magnesiæ sulph. ℥j in divided doses, until the bowels should move.

24th. Spasms recurring more frequently, of longer duration, and more painful; has had three evacuations; complains loudly of pain in the hips and loins; subsultus tendinum and carphologia persistent; had been very delirious during the night. Directed that the painful joints and muscles be rubbed with the following liniment:—

℞—Ol cajuputi,
Chloroformi, āā f℥j.
Camphoræ, ℥vj. M.

25th. Skin not so moist. Up to this time the patient's clothing had been literally dripping with sweat. Spasms more severe and painful.

℞—Tinct. lobeliæ, f℥ij.
S. One teaspoonful every hour.

26th. Has taken all the lobelia, but has felt no nausea. No improvement as regards the spasms. I now gave half a grain of tartar emetic every hour, combined with morphia, but with no effect. The next day it was increased to one grain, the morphia left out, and wine of ipecac substituted. This was continued for twenty-four hours without producing any nausea. He continued delirious at night, with but little improvement in the tetanic symptoms until the 30th, when there was such a marked feebleness of pulse that we placed him on frequent doses of spir. ammonia aromat. and brandy.

Oct. 6th. Gradual improvement. The attendants had been able to flex the thighs sufficiently to prop him up in a semi-sitting posture in bed; no delirium; muscular rigidity slowly but steadily fading out.

10th. Able to walk across the room, but very stiffly and awkwardly, and must have an attendant to lean on for support.

19th. Able to go down stairs and to walk around the yard. Still stiff about the hips and knees, and has a light spasm on waking in the morning, as if this nervous irritability accumulated during sleep.

25th. Has no more spasms, and but little stiffness. Appetite good, and he feels strong and well as ever.

I have reported this case thus far, not for the purpose of lauding the wonderful effects of any particular remedy or line of treatment, but rather to show how utterly inert all remedies proved. In truth, as Dr. Cassaday humorously remarked, the only drug that seemed to exert any positive and undoubted effect, was the sulphate of magnesia. The large doses of quinia, 24 grains daily, continued for two weeks, produced none of the toxic effects of that drug. The average daily quantity of bromide of potassium was ℥ss, continued over two weeks, then gradually diminished.

Lobelia and antimony had no effect at all after the first dosing with lobelia.

If the calabar bean had been obtainable, I should have tried it, and probably accorded it all the praise. As it is, I attribute more good to the increasing administration of nourishment than to anything else.

Before concluding, I would call attention to one point, the pain in the hip and knee joints. In looking over the authorities I have at hand, I have been unable to find any mention of such pain; still, in this case it was a prominent, and to the patient a very troublesome, symptom. I think it was caused by the long-continued and forcible contraction of the evenly balanced muscles, grinding the articular surfaces against each other, as each set of muscles gained, alternately, a momentary mastery over the opposing set. Or, it may simply have been of the nature of the rheumatoid pains so often seen in various affections of the nerve-centres, and which are also, as in this case, attended with profuse acid sweats. Still, the fact of these pains occurring in the joints of the lower extremities, which were affected with spasms, and not in those of the upper extremities, which were not affected, would tend to show that they were due to the cause first mentioned.

EFFECTS OF QUININE UPON THE UTERUS.

By F. K. Bailey, M. D.,
Knoxville, Tenn.

We often see articles in the Medical Journals upon the Oxytocic effects of sulph. quinine. The inference is that some practitioners consider it unsafe during pregnancy. For many

years my field of practice was in a region of country that was extremely miasmatic; for nearly half the year whole neighborhoods of people were prostrated by intermittent and remittent fevers. As a natural consequence, the sickly season would find more or less women pregnant.

The result of much and continued observation in the use and effects of sulph. quinine was, that whenever the agent was indicated as an antiperiodic it was freely and fearlessly exhibited. It was very common to find a pregnant woman suffering from uterine pain during a fit of ague, and abortion or premature labor often occurred in cases when timely antiperiodic treatment could not be carried out. In all such cases it was my practice, as well as that of others, to administer quinine promptly and freely. There was no other way to carry a patient over such a period of danger, except to suspend the periodical tendency.

Again, the question is often asked, is quinine admissible or ever indicated during labor, to regulate the expulsive efforts of the uterus? In answer to this I can say that in very many instances during labor occurring in the summer or autumnal months, I have given quinine with the most happy effects. It was often the case that natural labor at term was ushered in by a chill, and the depressing effects of malaria would render the pains feeble and without expulsive power. At this juncture a full dose of quinine would equalize the circulation, and render contractions more forcible.

The conclusion, then, is, that sulphate of quinine may be considered safe in all conditions of the system where it is indicated as an antiperiodic. Although its modus medendi may not be fully explained, still it is probable that its action is principally directed to the spinal system of nerves.

Untimely uterine pains, either so slight as to be merely annoying, or so energetic as to endanger abortion, are pathological, and can only be obviated by appropriate remedies; whereas *timely* efforts are physiological, and may require, sometimes, the aid of the same remedy to promote them which in the other case will suspend them.

There are analogous conditions of the system, in which malarious poison will produce dysentery, readily curable by antiperiodics.

Again, there are morbid conditions from paludal causes, in which there is torpor of the intestinal canal. Quinine, in my hands, has often acted as an evacuant in such cases, and the practical lesson taught is, that we should ascertain the true pathological condition under which our patients labor, and prescribe remedies that are indicated to remove that condition, however paradoxical it may appear to a superficial observer.

ON LIGATION OF THE FUNIS.

By Hiram Corson, M.D.,

Of Conshohocken, Pa.

In the Reporter of October 12th, Dr. A. F. A. King has "remarks" on a report of mine to the Medical Society of the State of Pennsylvania, in which he angrily accuses me of misrepresenting him in my paper on "Ligation of the Funis". I regret that Dr. King should feel aggrieved I intended no disrespect to him when I said I could not see a word of truth in a certain paragraph. I did not mean that he had deliberately asserted what he knew to be false, but, merely, that *to me* it did not seem to be true. And so with his facts; to me they were not facts, and therefore I called them his pretended facts, not doubting at all that he believed them, but imputing to him want of correct knowledge on the subject. As regards the word "strictly," I do not know why it was left out; possibly I thought it superfluous, or perhaps by mistake. If I were to say Dr. King is an honest man, would it not be as proper as to say Dr. King is a strictly honest man? I may be dull of comprehension, or may have a strange "manner of understanding English," as suggested by Dr. King, but even he will hesitate to think me base enough to pervert the meaning of his article to bring reproach upon him. When, a few years ago, Dr. King's essay was published, I read it carefully, and was so struck with its errors that I concluded it must have been written by a very inexperienced person. Instead, therefore, of mortifying him by writing a criticism of it for publication in a Medical Journal, I addressed a letter to him, and pointed out the errors, with the hope that he would come to see and acknowledge them; I afterwards visited him at his home, and again called his attention to the errors into which he had fallen, and also told him that I had prepared a brief paper on the subject for our "Transactions." I have, in another place, thanked Dr. King for calling atten-

tion to this subject—Ligation of the Funis—inasmuch as it was one about which I had not thought much, but had followed the usual custom.

Dr. King is an ambitious, energetic, young man, and I feel kindly towards him; but no feelings of friendship for him, or any other man, in high or in low places in the profession, shall prevent me from attempting to expose their false theories and pretended facts. I was as careful not to say an offensive word to him when he was plain Dr. King, as now, when he is all ablaze with titles. But, *strictly* speaking, it is more important to correct his errors now, than then. As a teacher he may communicate them to his pupils as truths, and thus do infinite mischief. As but very few of your readers have access to the "Transactions of the Medical Society of the State of Pennsylvania," in which my paper is printed, I send you for publication that part of the Montgomery county Report which is headed "Ligation of the Funis," so that they may see whether I have unjustly criticised Dr. King's essay.

In our report for 1869 we referred to the essay of Dr. King, of Washington City, on this subject, and showed the error of his belief that after the birth of the child the blood flows *from* it to the placenta, through the umbilical vein, and that in that way the surplus blood, with which he thinks the child is oppressed and its organs engorged, gets out of its body, and to facilitate which, he advises that the cord be quickly cut, so that the blood may flow *from* the umbilical vein. This we showed to be a palpable error, inasmuch as no blood can flow from the child through the umbilical vein to the placenta, for the reason that that vein or vessel carries the blood the other way, from the placenta *to* the child. We also showed the propriety of waiting—neither cutting the cord, nor tying it—until pulsation in the cord had ceased, and all the blood contained in the vessels of the cord and placenta had passed into the body of the child, to whom it belonged, not one drop of it belonging to the mother. We claimed, too, that it would be very wrong to either cut or tie the cord quickly after the birth of the child, as either operation would deprive the infant of some ounces of blood which properly belong to it, and which it always gets, provided no hasty and officious interference prevents it. In conversation with physicians, since that time, I have been surprised to find that some of them do not comprehend the facts in relation to the subject. Some thought the blood in the cord and placenta was the mother's blood, and a few had regarded the operation of putting a ligature on the maternal end of the cut cord as a precaution to prevent blood being drained away from the mother. One physician argued strongly that the blood which flows in the child's body comes directly from the vessels of the mother, through the umbilical vein, to the child, and, after circulating there, goes back through the umbilical arteries of the child and the cord to the mother, and mingles with her blood. Another eminent physician held the same opinion. As already alluded to, some believe that hemorrhage may take place through the cord, from the mother. Drs. Neill and Smith, in their *Compendium*, favor this idea. At page 534 they say: "The two ligatures are useful in case of twins, which sometimes have a common placenta." A friend has also told me that a professor of obstetrics, to whom he applied for information, said it was a proper precaution. Dr. Horace Smoot, of Virginia, who in an able review of Dr. King's *Essay* disproved many of his pretended truths, himself seems to be in a grievous error. On page 65, *Med. and Surg. Reporter*, Jan. 22, 1872, he says: "As soon as the cord ceases to pulsate, we know from that fact that all superfluous blood, if there should be any that might interfere with the establishment of respiration by a congestion about the heart and lungs, has been gotten rid of and found its lodgment *in the cord and placenta*." It is lamentable that intelligent physicians should hold such opinions, and inculcate them. Tie the cord of the first child, in a case of twins, for fear that the mother's blood, or the blood of the other child, should come streaming through it! Talk about superfluous blood being driven back from the child and finding a lodgment in the cord and placenta! Assert that the blood of the mother circulates in the child's! Why, have we learned nothing? Does Physiology teach us thus? No. Shall we, on such erroneous opinions, whether inculcated by teachers or writers, found a practice, and quickly tie the cord, or cut the cord to avert supposed dangers? I hope not. But, to return to Dr. King. He says: "Every infant, except those precipitated by a single pain, comes into the world in a state of partial or incipient apnœa. Venous blood predominates over the arterial, and exerts its sedative influence upon the brain and nervous centres; and of this arrangement we observe the utility, in that it prepares the delicate and susceptible nervous system of the infant to withstand the shock, by light, sound, etc., so suddenly impressed upon it as it emerges from the silence and darkness of the uterine cavity, into the noise and light of the world. If the keen susceptibilities of the infant were not thus obtunded, by the sedative influence of unaërated blood, then we should not be surprised to see every new-born child ushered into the world with a convulsion. That children always *are* born in the condition of incipient apnœa, is plain. At birth, and for a certain period prior to it, the circulation of blood through the placenta has in part or wholly ceased; *this we know, for the fœtal pulse felt in the cord no longer* reaches

the placenta." Dr. King, at the time of writing the above, had attended but very few cases of labor. In looking at the above quotation, I cannot see one word of truth in it, and I believe greater experience will cause him also to see his errors. At page 32 of his pamphlet, he asks, "Is it natural and proper that the cord should pulsate, and pulsate strongly, and throughout all or a greater part of its length, after the child is expelled?" And he answers, "We think not." My experience in thousands of cases proves Dr. King's opinions to be quite erroneous. I doubt not that the heart beats steadily and sends the blood regularly to the placenta, and receives it steadily, through the umbilical vein, during every part of the labor. Hundreds of times have I seen children born after hours of terrific pains, and yet the instant they came into the world they yelled furiously, and the pulse was beating violently. Dr. King having awakened my attention to this subject, and some of my neighboring physicians having practiced cutting the cord quickly, I resolved to observe more carefully than before the operations of nature after the birth of the child, to see what would take place if we should not interfere; and in the following cases noted the length of time that the cord continued to pulsate, 1st, near to the placenta; 2d, within an inch of the navel; and 3d, in the umbilicus itself.

Case 1. Healthy male child. Cord pulsated inside vagina 10′ (ten minutes), within one inch of navel 25′.

2. Male. In vag. 10′, then placenta was delivered, after which pulsation was felt an inch from the navel 5′ longer.

3. Female. In vag. 8′, near navel 14′.

4. Male. In vag. 12′, near navel 16′.

5. Male. In vag. 20′, at navel 45′. In one week it had jaundice.

6. Male (delivered with forceps). No pulsation in cord for one minute, then came in half its length, ceased in the cord at the navel in 10′, and was felt in the umbilicus 3′ longer.

7. Female, first child. In vag. 9′, near navel 14′, in umb. 19′. Pulsations at birth 160 in a minute.

8. Female. In vag. 6′, near navel 11′, umbilicus 19′. At birth the pulsations were 144 per minute; after they ceased in the cord, were 144 in the umbilicus.

9. Female (easy labor). None in vag., 1′ near navel, 9′ in umbilicus.

10. Male (slow but easy labor, inhaling ether many hours). None in vag., 2′ at navel, 9′ at umbilicus.

11. Male. In vag. 2′, near navel 15′, in umb. 23′. Jaundice on fifth day.

12. Male (quick but violent labor). In vag. 2′, navel 7′, umb. 11′.

13. Female. Vag. 2′, navel 5′, umb. 15′. (*At the navel*, means within an inch of the umbilicus).

14. Male. In vag. 2′, near navel 18′, in umb. 22′.

15. Twins, first one Female, born at 5 A. M. In vag. 2′, navel 11′, umb. 20′.

16. Second one born at 6 A. M., Male. In vag. 3′, near navel 8′, umb. 12′.

17. Female (forceps). In vag. none, near navel 8′, in umb. 16′.

18. Male. In vag. 7′, near navel 9′, umb. 12′. Placenta delivered at 7′.

19. Male (weak child). In vag. none, near navel 8′, in umb. 12′.

20. Male. In vag. 3′ (placenta delivered naturally in 15′), near navel 23′, umb. 27.

21. Male. In vag. 5′ (placenta came in 6′), near navel 8′, in umb. 11′.

22 Female (face presentation, produced cephalic version). In vag. 25′ when placenta came, near navel 30′, in umb. 35′. When the child was lying quite still, the pulsations were only 80; on crying, would go up to 140; if again quiet, would run down to 80; but made to cry again it would run up away above 100.

23. Female. In vag. 2′, navel 5′, umb. 10′.

24. Female. In vag. 2′, navel 20′, umb. 25′. Placenta came in 10′.

25. Female (eight hours labor, ether and chloroform). In vag. 2′, navel 13′, umb. 20′.

26. Male. In vag. none, near navel 6′, umb. 10′.

27. Female. In vag. none, navel 6′, umb. 11′.

28. Female. In vag. 2′, near navel 4′, umb. 6′.

29. Male. In vag. 4′, navel 10′, umb. 12′.

30. Female. In vag. 11′, navel 19′, umb. 24′. Pulse in the umb. 133 in a minute when it ceased in the cord.

31. Female. In vag. 13′, near navel 20′, in umb. 25′.

32. Male. In vag. 10′, near navel 12′, in umb. 17′.

33. Male. In vag. 5′, near navel 25′, in umb. 30′.

34. Female. In vag. 10′, near navel 18′, in umb. 23′.

It will be observed here that in the thirty-four cases, two were attacked by jaundice. Dr. King speaks of this disease being frequently caused by the blood not being permitted to run *from* the child, by the umbilical vein (an impossibility), a congestion of the liver being the result of the blood being kept in the child's body (as was done in all those cases), and yet only one in seventeen was affected here. I have spoken to persons about the cord pulsating after the delivery of the placenta; they considered it an impossibility, and yet you may see that such was the fact in several of the above cases.

The above remarks were not intended as a "strictly" complete review of the paper of Dr. King, but it is not unlikely that, if he should not publicly renounce the errors in his essay, I shall, ere long, make a "strictly" careful review of it, according to my "manner of understanding English." In conclusion, allow

me to say, that I read with great interest and accept most thankfully whatever is new and valuable in our profession, but at the same time I am not willing to give up the grand, old, unchangeable truths taught by Physick and Horner, one of which is that the blood flows *from* the placenta *to* the child, through the umbilical vein, and from the child to the placenta by way of the umbilical arteries, and not, as now asserted by Dr. King, in the opposite direction.

Hospital Reports.

PHILADELPHIA ORTHOPÆDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES.

1701 *Summer St., Philadelphia.*

Service of Drs. Morton and Goodman.

[REPORTED BY DAVID DAVIDSON, M.D., RESIDENT SURGEON.]

Case I.—Ida E. F., aged 7, applied for treatment at Dr. Morton's out-door clinic February 26, 1872. No family history of importance. The child has always been rather delicate; noticed about a year from date a slight lameness in right limb; she was then thought to be suffering from hip disease, and so treated by her physician for some time. Tinct. iodine was applied over the hip with constitutional remedies. Four months later, bulging of right breast, with slight spinal curvature, was noticed; the child suffered little or no pain, but the slightest exertion would cause extreme fatigue.

On examination there were no signs of any hip trouble; had considerable swelling on inner side of groin and abdomen; the lower dorsal and lumbar vertebræ presented lateral curvature to the right, and immediately above the crest of the ilium a soft, circumscribed, fluctuating tumor was found, and pressure on this or the contiguous vertebral bodies produced pain. There was also a feeling of deep fluctuation along the psoas muscles.

Treatment. In order to support the spine and relieve pressure, a spinal brace was ordered, which extended well over the pelvis. The lacto-phosphate of lime and cod liver oil, (Trinder's Prep.), tablespoonful three times a day, milk punch; and iodine ointment to be well rubbed over the abscess three times a day.

April 4th. Swelling disappearing about the spine and groin, and the general health better.

July 1st. Has been wearing apparatus steadily; no pain; can walk a considerable distance without fatigue; all evidence of abscess vanished; continue lacto-phosphate of lime and cod liver oil.

Complete Osseous Anchylosis of Both Hip Joints, with Angular Deformity, following Morbus Coxarius—Operation and Relief.

Case II.—George W., aged 14, admitted to Hospital February 20, 1872. Father killed in the army; has mother and four sisters, all healthy. When six years old had a severe attack of hip disease with abscess, which was lanced at the time by their family physician; several fistulæ afterwards formed. Three years later fell down stairs and injured his hip severely. No further history could be obtained.

On examination there was found complete osseous anchylosis of both hip joints; the right thigh and leg were thrown across to the left side, so that the popliteal space of the right just covered the left patella. There was also excessive talipes equinus. The left hip joint presented firm anchylosis, but the limb was quite straight. The locomotion of the lad was so much impaired, that it was determined to straighten the right leg, and, if possible, to produce a false joint. After etherization, the adductor tendons were divided, and when force was applied, the neck of the femur fractured and the limb was readily brought into position. The tendo-Achilles was also divided, and the malformed foot rectified. An extension apparatus was then applied, the weights to be increased daily. This was continued for four weeks, when the lad was allowed to be up, having a steel and leather brace applied, such as is used for paralysis.

May 1. Left hospital able to walk, the great deformity and impediment to locomotion being removed.

Marked Lateral Curvature of Spine.

Case III.—Lizzie J., æt. thirteen years, applied for treatment at Dr. Goodman's out-door clinic, January 8, 1872. Father died from phthisis; mother healthy. Patient delicate from birth; early became accustomed to using left side more than the right; mother noticed sixteen months previously a lump on left side of spine, which has constantly grown larger; has all the symptoms of lateral curvature; pain over abdomen; elevation of shoulder; any stooping movement causing pain, and walking attended with extreme fatigue; general appearance miserably strumous.

Treatment. Application of Kolbe's spinal support; shampooing of right side; daily exercise on swinging bar; good diet; milk punch and tablespoonful of Trinder's preparation of lacto-phosphate of lime and cod liver oil three times a day. Dr. Goodman uses Mr. Trinder's preparation in nearly all his cases of hip, spinal and other strumous affections with most decided benefit. He finds it less disagreeable, more easily taken, and better digested, than any other similar preparation, building up such patients in a wonderfully short time.

Feb. 12. Wears apparatus with comfort. General health better; no pain; able to walk considerable distance without fatigue; apparatus readjusted.

April 15. Still improving; no pain; continues to wear apparatus with comfort; general health excellent. This class of patients require daily systematic gymnastic exercise, only to be obtained in a well-regulated orthopædic hospital, under experienced attendants. Considering that treatment was carried out at patient's home, the improvement was most satisfactory.

Congenital Talipes Equino-Varus—Cure without Tenotomy.

Case IV.—Frank M., æt. nine months, was brought to Dr. Goodman's out-door clinic, Feb. 29, 1872, suffering from marked double club-foot, of the equino-varus variety. Child had never walked. On examination it was found that the feet could be brought almost into normal position by forced manipulation. Dr. Goodman never performs the operation of tenotomy for club foot when by force the foot can be manipulated into its normal position, but prefers to have such cases treated by forced extension twice a day, bandaging and placing the foot in Kolbe's club foot shoe. Dr. G. thinks this plan of treatment is more satisfactory than when operated on. The mother was directed to bring the child to the hospital daily until she was taught how to manipulate, and bandage, and adjust feet in shoes properly. Kolbe's night shoe, with heel and side screws, were constantly applied.

June 11th. Feet straight; all deformity disappeared; able to stand and walk a little; night-shoes discontinued; strong leather shoes ordered, with steel to support the ankle. Patient discharged.

Medical Societies.

ALLEGHENY COUNTY (PA.) MEDICAL SOCIETY.

The regular meeting of the Allegheny County Medical Society was held on Tuesday, October 15. President George D. Bruce in the chair. The minutes of the last regular meeting were read and adopted. Dr. Cheesman, member elect, signed the constitution and was duly admitted into the Society.

Nominations for officers to serve for the ensuing year, to be elected in January, came next in order.

For President, Drs. Maginni, Shaw and Gilmore. Vice President, Drs. C. B. King, Shaw, Mabon, Gilmore, James King, Benham, Arnholt, and Le Moyne.

Recording Secretary, Drs. Benham and Daly.

Corresponding Secretary, Drs. Galaher and Lang.

Assistant Recording Secretary, Dr. McKelvy.

Treasurer, Dr. N. McDonald.

Censor, Dr. E. A. Wood.

Editorial Department.

Periscope.

The Unfitness of Starchy Food for Infants.

Dr. Sonsino has an article on this topic in the *Practitioner*. He remarks:—

Let us see what is the principal difference of composition between animal food and vegetable food. Partly, that in the latter we find more materials refractory to any digestion; that in consequence a more elaborate power of digestion is needed to obtain the nutriment from it. We find in the one and in the other, albuminous principles, fatty principles, saccharaceous principles; whereas *only starchy principles*, which constitute the principal ingredient of vegetable food, are not at all present in animal food, be it meat or any other tissue, or a product of the animal, as milk or eggs.

Therefore, the same physiological and anatomical arrangement that in infants gives evidence of its being not prepared for vegetable food, supports the conclusion that starchy matters cannot be well digested in infancy, and that there is really in infancy what may be called *a physiological dyspepsia for starchy aliments*.

Another valuable confirmation that starchy matters are not well digested by the infant, we have, lastly, in the very interesting observation made by a Frenchman, M. Guillot, who in the autopsy of a number of infants found a jelly-like substance present in the intestines, which to the test of the tincture of iodine gave evidence of containing a large quantity of unaltered starch.

Having seen how many reasons concur to prove the indigestibility of starch in early infantile life, it is time to speak of the physiological experiments that give support to the thesis which I advocate. But before giving account of my new researches, I must say that some researches upon digestibility of starchy matter in early life have been already made by others, concerning one of the digestive juices, viz. saliva.

Bidder and Schmidt found on examining the power of saliva to convert starchy matter into glucose, that in some new-born animals that

property is defective. The same physiologists collected some saliva of an infant four months and a half old, and found that this fluid converted the glue of starch into glucose with great difficulty and very slowly. Prof. Schiff, in his lectures on the physiology of digestion, says that the active principle of saliva appears in man only at the age of the first dentition, and confirms all the results obtained by Bidder, who was the first to make researches on this subject.

Curious is the exception found by Prof. Schiff for a single animal, the guinea-pig, the saliva of which, examined in the first week of life, has well displayed the property of converting starch into glucose. But this exception was not found in any other animal, not even of an analogous kind to the guinea-pig, as the hedge-hog.

I insist upon this singularity presented by the guinea-pig, inasmuch as it is coincident with the fact that the same animal at its birth offers conditions of more advanced development than the generality of Mammalia. It is notorious indeed that it is born with open eyes, and very soon is able to run about to search for its food, and to render itself independent of the heat of the mother, and that its process of dentition begins very early. Thus the very exception offered by guinea-pigs allows us to conclude that *in the generality of Mammalia saliva acquires its digestive power over starchy matter only at a degree of development which, in the larger number of the same animals, is not reached at the time of birth.*

But saliva is not the only digestive fluid which assists in the digestion of starchy matter. Pancreatic juice and enteric juice also take part in it. As far as I know, no one has made any researches with the view of establishing whether or not these latter juices possess in new-born animals the same digestive power over starchy matter as in the adult animal. The performance of such researches on pancreatic and enteric juices is really more difficult than that concerning saliva, inasmuch as these juices are poured into the digestive canal, and we cannot therefore collect them in man as we can do with saliva. Thus the direct examination of the same juices can be instituted only in *animals*. But in the same manner as physiologists have established the general digestive property of pancreatic and enteric juices, especially by experiments on *animals*, it appeared to me feasible to elucidate the function of digestion in early life by analogous experiments *on very young animals*.

In making such researches I had the opportunity of availing myself of the advice and co-operation of my friend, the well-known physiologist, Prof. Schiff, who put at my disposal all the means offered by the laboratory in the Museum of Florence.

Prof. Schiff had long before instituted a large number of researches on the action of pancreatic juice in the digestion of adult animals. We had then to repeat them, as far as possible, in the same manner on young and sucking animals, to give them a value for comparison between the digestion of the young and of the adult.

But to estimate the digestive action of pancreatic juice on starch in very young animals, we could not have recourse to the method of obtaining the pancreatic juice by a pancreatic fistula, as the smallness of the viscus in young animals renders the latter impracticable. We had, therefore, recourse to another expedient, which in the young, as in the adult, could be practicable with the same good result.

The process of experiment is the following:—After having killed the animal, the pancreas is immediately drawn forth, and being isolated, it is hashed and reduced to the consistence of pap. This is put in sufficient distilled water, and thus there is obtained a pancreatic infusion which is endowed with the same digestive powers as the pancreatic juice. If we pour some drops of this *fresh* infusion on some glue of starch, and afterwards apply to the mixture Trommer's test, we shall have evidence whether the transformation of starch into glucose has taken place, and therefore whether the pancreas of young animals possesses or not the digestive action on that material as it does in the adult.

We made the experiments with the pancreatic infusion of five sucking animals, *i. e.*, a little dog, five days old; another dog, fourteen days old; a cat, seven days old; and two rabbits, seven days old. The result was, that the fresh pancreatic emulsion of all these animals was incapable of transforming starch into glucose, *even after a long contact*, whereas the same *fresh* pancreatic emulsion of *adult animals* produces the transformation in a very short time indeed, *almost immediately*.

We must add, that if a little transformation began to be detected when the pancreatic infusion was tried a few hours after being prepared, that transformation cannot be attributed to a true digestive action of pancreatic juice, inasmuch as it is well known that many organized matters, and especially those belonging to glandular tissue, upon entering into putrefaction, give rise to a ferment which is capable of transforming starch into glucose as well as pancreatic juice, or saliva, in normal condition can do.

I cannot pass over in silence the fact that researches were made also on *enteric juice*, with the same view of deciding whether the same juice in the young is or is not endowed with the digestive action on starch as in the adult. But I must say that these latter experiments were not so conclusive as the above concerning pancreatic juice. In fact, some of them gave us evidence that enteric juice was already endowed with the digestive action on starch in the same young animals in which we had found the pancreas inactive.

Thus our experiments, if they leave some uncertainty as to the enteric juice, allow us to come to a conclusion concerning at least the

pancreatic juice. This conclusion may be expressed in the following words: *Pancreatic juice in dogs, cats, and rabbits in the first week of life, perhaps for some days more, is devoid of any digestive action on starch.*

But can I infer from the above conclusion that the same inability of the pancreas to digest starch in young of the animals above named exists alike in the early life of man?

If the physiologists cannot perhaps accept such an inference as the result of an experimental fact, nevertheless the best founded analogy maintains it, the more so as the animals on which we have experimented are of three different species, two carnivorous and one herbivorous, and as the time of the sucking life in them is much shorter than in infants. But conceding that my own researches do not afford sufficient arguments to establish the incapacity of the pancreas in infancy to digest starchy matter, and that they have only opened a field to new investigations, to demonstrate a presumed fact that would establish a great difference between the digestion of the infant and of the adult, we cannot, however, forget that the inactivity of saliva has been verified directly in infants. Now this alone, and still more added to the result from M. Guillot's observations above referred to, are sufficient to allow us to establish that *in the early life of man, probably till the beginning of dentition, infants offer a true physiological dyspepsia for starchy aliments, caused by the inactivity of one at least—probably of all—the humors that concur in the digestion of those aliments.*

Tests for Petroleum.

Since dangerous oils cause so many accidents, the following note by Prof. CHANDLER, in the *American Chemist*, is worth remembering.

There are two distinct tests for oil: (1) *the flashing test*, (2) *the burning test*, which are often confounded; and when the law or ordinance specifies *the fire test*, there is a doubt as to which of the two tests is intended.

The flashing test determines *the flashing point* of the oil, or the lowest temperature at which it gives off an inflammable vapor.

This is by far the most important test, as it is the inflammable vapor, evolved at atmospheric temperatures, that causes most of the accidents. Moreover, an oil which has a high flashing test is sure to have a high burning test, while the reverse is not true.

The burning test fixes the burning point of the oil, or the lowest temperature at which it takes fire. The burning point of an oil is from ten to fifty degrees Fahrenheit higher than the flashing point. The two points are quite independent of each other; the flashing point depends upon the amount of the most volatile constituents present, naphtha, etc., while the burning point depends upon the general character of the whole oil. One per cent. of naphtha will lower the flashing point of an oil ten degrees, without materially affecting the burning test. The burning test does not determine the real safety of the oil, that is, the absence of naphtha. The standard which has been generally adopted as a safe one, fixes the flashing point at 100° F., or higher; and the burning point at 110°, or higher.

In the English act, and some of the more recent laws of the States of the American Union, the burning test has been very judiciously omitted, as two distinct tests are often confusing, and moreover, the burning test, or point, is not an index of the safety of the oil. More than half of all the samples of oil which have been tested for the Health Department did not take fire below 110° F., consequently they were safe according to the burning test, but only 28 of 736 samples were really safe, all the rest evolving inflammable vapors below 100° F.

The flashing test should, therefore, be the only test mentioned in laws framed to prevent the sale of dangerous oils.

What flashing point should be selected as a standard of safety, is a question on which there is some difference of opinion. The higher the flashing point, the safer the oil. Animal and vegetable oils do not flash below 500 to 600° F., hence it is impossible to have an explosion or any burning accident with a lamp or can filled with such an oil. The flashing point should be somewhat higher than the highest temperature the oil ever reaches in the lamps or cans. Our highest summer temperature does not far exceed 90° F., though a can of oil placed in the sun, or near a fire, might become much hotter.

The point of 100° F. does not seem to me to be high enough to secure immunity from danger, though it may be said that very few, if any, accidents occur with oil which does not flash below this temperature. In some of the laws 110° is fixed as the flashing point, and in one of them, 120° F.

What Some Tea is Made of.

Among some analyses of commercial tea in London, examined not long since, was some called Breakfast tea or Morning tea.

Dr. LETHEBY said he had made a further analysis of the six samples of tea in question, and found that when he had thoroughly exhausted them by the repeated action of boiling water the proportion of soluble matter in them amounted to from a little more than 11 per cent. to 13½ per cent. That extracted from common Congou ranged from 22½ to 27½ per cent. Again the woody matter of the tea ranged from 73 per cent. to a little more than 77 per cent. The woody matter of ordinary Congou ranged, according to his experiments, from 59½ to 65 per cent. The proportion of the active principle of the tea amounted to a mere trace, a fraction that was not weighable, whereas in ordinary Congou it would amount to about 2 per cent. Those results confirmed the opinion he had expressed, that it consists

of exhausted leaves almost entirely, there being a little good tea mixed with it. He was of opinion that it was unsound and unwholesome, for it was not merely exhausted but decayed. He thought it would be very likely to produce derangement of the stomach.

Dr. John Stenhouse, for several years Professor of Chemistry at St. Thomas' Hospital, said he had given great attention to the chemistry of tea; indeed, he had made it his study since 1842. He had examined the samples of the six chests, and had carefully analyzed them. Their color was a brownish black, and the infusion had a nauseous odor. There was scarcely any odor of good tea in them at all. The result of his examination was that the tea had gone through some process of putrefaction. He first tried it to find how much extract it would yield to boiling water, and after thoroughly exhausting it he found that it yielded about 13¾ per cent. of soluble matter. He found in it one three-hundredths of 1 per cent. of theine, instead of 2 per cent. It would require 65 lbs of that tea to yield as much theine as 1 lb. of sound Congou. He thought this tea unwholesome; at any rate, it would not have the beneficial effects that sound tea would have. It was not fit for human food.

Children; their Diseases and Treatment.

The following is from an address by Dr. Mattocks, in the *Transactions of the Minnesota State Medical Society*:—

A very common error we often fall into is the generalization of the diseases of children, for instance, the treatment of teething, and its many complications, as a special disease.

This brings us to a brief consideration of the treatment of children.

Advanced medical science advises but little medicine in the treatment of children. Advanced ignorance admits no medicine at all. As a general rule the acute endemic diseases of infancy are traceable to some known cause; such as scanty or improper food—else exposure to the changes and vicissitudes of the weather; or, to put our proposition differently, adult diseases occur, children's sicknesses are caused. Taking this view of the case, the indication would be to protect children from the ignorance of their nurses, to demonstrate to them, if possible, the cause of the present attack, that they may in the future be on their guard against similar exposures.

In our *practice* with adults, we often neglect to trace out the cause of their disease. In many instances it is unnecessary. With children, however, the case is very different. Here we must find, oftentimes, our indication for treatment from the cause of the disease. For instance, in diarrhœa. With the adult, the simple fact of diarrhœa may be sufficient. Our duty is to check it. With the infant, on the contrary, we must know what caused the diarrhœa, whether it be irritating food, an insufficiency of food, or whether it be simply the result of reflex irritation.

The diarrhœas of childhood, as a general thing, are the result of improper food. This leads to the inquiry, what is the proper food for an infant. It is certainly strange that we should ever find it necessary to ask this question, what food shall we give a baby? Give it milk, of course—breast milk, if possible, if not, good cow's milk. But are you sure about this, you ask—better men than you have advised differently. Another says, I have fed my children with an artificial preparation, and they thrive on it. Yes, says another, and even better than upon breast milk. To this we answer, we have seen children thrive in squalor, filth, and exposure, but where one has lived through this ordeal of uncleanness, a dozen have died by reason of it.

Most of the writers upon the diseases of children, and all the discoverers of artificial food for infants, dwell in large cities where it is impossible to obtain good cow's milk, and rather than use an impure article, they are forced to resort to other means.

It does not necessarily follow, however, that because Prof. Meigs has found it necessary in Philadelphia to modify the diet of his little patients—when good food cannot be readily obtained—that you and I must do the same, living in a land where good milk is abundant, any more than we should send our sick babies to Fairmount Park, in Philadelphia, because the physicians of Philadelphia do it. Because Baron Liebig found it necessary to compound a food for his little grandson, must we use the same for everybody else's little grandsons? If good breast-milk cannot be obtained, I think we should establish a rule that good cow's milk, properly diluted, should be its substitute—that is, if good cow's milk can be obtained, of course insisting that milk from one cow should be used. In some instances, few we think, this food does not seem to agree with our patients; perhaps we do not sufficiently dilute it, or may be the milk is not fresh (we should bear in mind that nature furnishes the infant milk fresh from the breast), or that the utensils are not clean, or some other reason may exist, which patient and judicious investigation might remove.

A few pages might be spent with fitness in discussing the clothing of children, or rather the want of it. The physician is culpable who does not attend to the clothing of his little patients, or rather call the mother's attention to the matter, from time to time.

We remarked that the diseases of children were not necessarily peculiar. This is true of the treatment of children. They must be treated symptomatically. It seems to us that children suffer more than adults when sick, just as nervous people suffer more when sick, than the phlegmatic. Besides, the alimentary canal and the brain seem to be the seat of diseases more often with the little ones, and our personal experience teaches us that where either the one or the other is involved, much suffering ensues.

Arsenic as a Prophylactic in Rabies.

Dr. Ernest Guisan, in an inaugural dissertation presented to the faculty of Berne, quoted in the *Practitioner*, states that though he has arrived at no positive conclusion, he believes that, as in cholera, the germ of the contagion in rabies is formed by one of the lowest fungi. The period of incubation extends, upon the average, over five or six weeks The poison is then absorbed, spreads itself through the body by means of the circulation, and then multiplies indefinitely, producing ultimately irritation of the nervous centres, and especially of the medulla oblongata. Dr. Guisan then enters into the prophylactic treatment of the disease by means of arsenic, and gives the following clinical observations:—"A man was bitten on the 24th of June by a mad dog, in the hand; a girl was bitten at the same time, and shortly after died from hydrophobia. Two days after the accident the man applied to Dr. Guisan's father, who cauterized the wound deeply with potash, and kept the wound open with cantharides. Minute doses of belladonna were given morning and evening up to the 18th of July, when the patient had rigors and pains in the body. From this time, up to the 26th of July, the symptoms of hydrophobia became gradually more and more expresssed in spite of repeated venesections and the use of calomel and opium. At this date, however, small doses of arseniate of soda were prescribed every four hours (0·003 of a gramme). On the 27th, marked amelioration of the symptoms was observed, which continued till, on the 30th, all danger had passed and complete recovery took place." Dr. Guisan gives another case in which a rabid dog, between the 7th and 9th of June, bit thirteen persons in various towns of the canton of Freiburg. All were recommended to be treated with one-twentieth of a grain of arsenic morning and evening, as a prophylactic measure. Eight submitted to this prophylactic measure, and none were affected. Four declined, or were not allowed, to take the arsenic. Of these four, two remained unaffected, and two died. One began the arsenical treatment, but speedily left it off. She was attacked, but at a much later period, and died. Dr. Guisan not only recommends the internal employment of the arsenic, but that the wound should be dressed with it.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Prof. J. F. Miner, of the University of Buffalo, has for three years been advocating Ovariotomy by the method of enucleation. He simply separates the tumor from its attachment to its pedicle by careful and patient efforts. No hemorrhage requiring ligatures occurs, and the whole cumbersome apparatus of clamps, ligatures, etc., is dispensed with. This, we are convinced, is the true and only theory for such operations, although exceptional cases will require the old procedure. Prof. Miner's articles can be found in the Buffalo *Medical and Surgical Journal*, June, 1869, and the *American Journal of Medical Sciences*, October, 1872. The latter is also published in pamphlet form.

——Dr. J. G. Richardson's *Report on the Structure of the White Blood Corpuscle*, published in the *Transactions of the American Medical Association*, has also appeared in pamphlet form. We briefly referred to his views in a notice of the *Transactions*.

——"*Diagnosis; A Story for Amateur Physicians as well as Regular Practitioners*," by Duff Childs, is a medical novel which may interest some readers. (Louisville, A. A. Gosnell. Price $1.00). After one or two efforts we have not been able ourselves to become sufficiently interested in it to read it very thoroughly, but the portion exposing the absurdities of certain doctrines of Hahnemann struck us as pointedly expressed and deserving of general perusal.

——Mr. Darwin's forthcoming work, on *Expression in Man and Animals*, bids fair (says *Nature*) to be of a more popular character than any of his other publications. It will commence with a statement of the general principle of Expression: that serviceable actions become habitual in association with certain states of the mind, and are performed, whether or not of service, in each particular case. This will be illustrated in the case of expression of the various emotions in man and the lower animals. The means of expression in animals will then be discussed, and the special expressions of animals and man, such as the depression of the corners of the mouth in grief, frowning, the firm closure of the mouth to express determination, gestures of contempt, the dilatation of the pupils from terror, the causes of blushing, etc. In conclusion, the bearing of the subject will be spoken of on the specific unity of the races of man; the part will be discussed which the will and intention have played in the acquirement of various expressions; and the question of their acquisition by the progenitors of man will be referred to. Seven heliotype plates, reproduced from photographs, will illustrate the work.

——The *American Public Health Associa-*

tion have published an organization and constitution, setting forth the objects of the Society and a list of the members. If this Association is faithful to the principles upon which it starts out, it will become a national benefit.

——The *Annual Address of the Retiring President of the State Medical Society of Ohio*, Dr. W. W. DAWSON, has been republished in pamphlet form. It is principally on medical instruction.

——The *Annual Address before the Medical Society of the State of Alabama*, by Dr. T. C. OSBORN, has also been sent us. It treats of the suppression of quackery, the formation of aid societies, reception of students in private offices, etc.

BOOK NOTICES.

Transactions of the Medical Society of the State of Pennsylvania, at its Twenty-third Annual Session. Vol. ix, Part i. Published by the Society. Philadelphia, 1872. 1 vol., pp. 263.

The contents of this volume are rich in the results of practical experience, and well represent the condition of the public health during the year in this Commonwealth. Instead of giving a list of the reports it contains, we shall merely call attention to several extracts of interest which we have marked in its perusal, and which will give a general idea of its quality.

The Address on Obstetrics is a most excellent practical essay on the use of the speculum in the diagnosis and treatment of diseases of the uterus, by Dr. WASHINGTON L. ATLEE. Written by a master hand, it deserves the most careful study. We hope it will be published in pamphlet form to insure a wider distribution. On page 112, Dr. CRAWFORD, of Delaware County, describes a most severe case of anthrax conducted to a successful termination in a very creditable manner.

A striking instance of very serious symptoms, mistaken for phthisis, produced by an elongated uvula, is described by Dr. James A. Brush, of Mercer County, on page 129. Such examples merit bearing in memory. The report of the Montgomery County Medical Society, by Dr. HIRAM CORSON, contains a large amount of information on small-pox and its treatment, scarlet fever, measles, and notes on ligation of the funis, which we reproduce elsewhere in part.

The County Societies were pretty well represented at the meeting, and we believe the aims of the organization are better understood by the profession throughout the State. This is as it should be, and we hope the spirit will increase.

A Practical Treatise on Urinary and Renal Diseases, including Urinary Deposits. Illustrated by numerous Cases and Engravings. By William Roberts, M. D., etc. Second American from the Second Revised and considerably enlarged London Edition. Philadelphia, Henry C. Lea, 1872. 1 vol., 8vo, cloth. pp. 616.

It has been now some three years since the first edition of this work was exhausted, and the delay in the appearance of a second has been owing to the desire of the author to render it as perfect as possible. The plan is the same, but the text has been thoroughly revised, and new articles on suppression of urine and paroxysmal hæmaturia have been inserted.

The author, after some introductory pages on the methods of examining the urine and the changes it undergoes by keeping, proceeds to speak of its physical properties, its odor, color, density, quantity and reactions. A chapter is then devoted to the chemical constituents of the urine and its various inorganic deposits in the natural state. Abnormal deposits and substances are next considered, including albumen, spermatozoa, sugar, vegetations, etc.

The second part discusses those diseases the chief character of which is an alteration of the urine. These include diabetes, insipidus and mellitus, gravel and calculus, and chylous urine. The third and last part embraces organic diseases of the kidneys. Several chapters are devoted to a very thorough exposition of Bright's disease. In reference to its etiology the author strongly maintains the view that the constant use of alcoholic liquors is a fertile cause. Pyelitis, pyonephrosis, hydronephrosis, cystic degeneration, cancer and tubercle of the kidneys are also treated at length. The work closes with chapters on the curious entozoa of the kidneys and on the equally curious anomalies occasionally found in their position, form, and number. A good index and carefully selected lists of the leading works on these topics are also found in the book.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 9, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

VITAL STATISTICS OF THE UNITED STATES.

It is much to be regretted, in the interests of science, that so little accuracy is found in the biological statistics of our country. In the passionate straining for wealth, in the subordination of all pursuits whose purposes are remote to those of immediate utility, in the ignorant adulation of the practical in preference to the abstract parts of science, we shall lose heavily in the long run. Vital statistics, except in a few cities, and one or two States, are deceptive and vague anywhere in the United States, and whatever show of perfectness they present are to be received with great deliberation.

Dr. J. M. TONER, of Washington, has attempted to utilize the various census reports, with a view of arriving at some general results with reference to the population of the United States. His essay is contained in the circular of information published by the United States Bureau of Education last March. It is illustrated by diagrams, to one or two of which we have already called attention in these pages. As representing to the eye that which columns of figures more slowly and inadequately bring to the comprehension of the mind, this method possesses great advantages.

One of these diagrams shows the whole population of the United States, and the population of males and females of the same age, according to the census of 1860; a second illustrates the ages at which an excess of one sex over the other exists in the different States; a third shows the proportion of white children of both sexes under fifteen years of age to the 1000 white females between fifteen and fifty years, the nubile age, in each State, at every decade from 1800 to 1870.

This latter, we are informed, was "devised and constructed to illustrate graphically the decline of the birth-rate in the United States." Once before we spoke of this table, and expressed the hope that this *apparent* decline was not misinterpreted by the author of the table. In this we fear we were wrong; for although Dr. TONER expressly says that he "does not propose to adopt anything or to attempt to explain this extraordinary condition," yet almost in the next line he goes on to say, "the American people, in this particular, are showing unmistakable signs of physical degeneracy," and refers in laudatory terms to Dr. ALLEN, of Lowell, on the subject. Dr. ALLEN is known as an extreme and illogical advocate of the physical degeneracy views, and we have on several occasions pointed out wherein he errs in his sweeping denunciations. Dr. TONER does not seem to think that, granting the facts he sets forth, there are other more likely and more agreeable explanations of them, resulting from immigration, etc., as heretofore indicated in these pages.

Nothing is more readily misinterpreted than statistical data. We observe that even Mr. HAVILAND, whose studies of the British Registrar General's returns have commanded so much admiration of late, has been rather severely and apparently justly criticised for some of his deductions. Hob-

by riding nowhere finds a freer field, and nowhere is there a more urgent need of absolute avoidance of prejudice, than in deducing the exact significance from statistics of vital events.

Notes and Comments.

Festina Lente.

An English contemporary says with great truth, it not unfrequently happens that a man, disgusted with the defective sanitary arrangements of the generality of houses, ancient and modern, builds a dwelling for himself and his family, constructed with all the latest improvements, and in his extreme anxiety to commence a career of longevity, rushes into it before the workmen are out of it, and while the walls are still saturated with moisture. The consequences are, as might have been expected; in addition to the architect's charges, the rash owner is called upon to pay within the first few months a further bill to the doctor, and too often to the undertaker also.

The Localization of Brain-Functions.

Meynert, says the *British Medical Journal*, one of the ablest of the modern students of the anatomy of the nerve-centres, has sought, by combining phrenological with clinical and pathological observation on the functions of the cortical layer of the cerebral hemispheres, to define to some extent the localization of the different functions in the gray matter of the cortex. He distinguishes five special functional centres. 1. The olfactory lobe or nerve, which, highly developed in animals well gifted with the power of scent, is almost atrophied in man, less highly endowed in this respect. 2. The walls of the fissure of Sylvius. These are in intimate relation with the power of speech, as is found in aphasia, which is the consequence of changes in them. 3. The occipital and temporal lobes. Anatomy shows the relations of these parts with the organs of the senses, the retina, labyrinth, and olfactory nerve. In cases of blindness and deafness rapidly developed, these lobes are the seat of evident alterations. The experiments of Flourens on the ablation of the cerebral lobes support this theory; for, if but little of the substance be removed, the senses are not much affected; but, if the ablation be carried deeper, the sensorial functions immediately cease. 4. The frontal lobes. These lobes are the principal seat of motor excitation, as is shown by their anatomical relations with the corpora striata. Besides, in the forms of psychoses which are accompanied by extensive disorders of the motility (general paralysis), these are the most atrophied of all the parts of the brain. The continued need of movement, the agitation of mania, are equally based upon change in the frontal lobes. 5. The cornu of Ammon. This organ plays an important part in the functions of motility, and almost always presents, in epilepsy, conditions of atrophy or sclerosis.

Mercury in Syphilis.

The editors of the *Gazette des Hopitaux* say:—To us it is beyond doubt that mercurial preparations, properly administered, shorten the duration not only of the secondary accidents, but even of the tertiary, which have resisted iodide of potassium administered alone. As to the choice of the mode of application, Sédillot's pills have appeared to us as efficacious and more agreeable to take than bichloride or the hydrargyric iodides. We know that each of these pills contains double mercurial ointment, 10 centigrammes; medicinal soap, 10 centigrammes; marsh-mallow powder, 10 centigrammes. They are daily prescribed by M. Richet, M. Hardy, and others. By giving these concurrently with iodide of potassium, and disusing them from time to time, so that they can be alternated with a draught containing chlorate and nitrate of potassa, they can be continued for months without producing either salivation or fatigue of the digestive canals. This is an excellent plan of treatment when one is anxious that certain accidents menancing existence, such as intracranial tumor, should rapidly disappear.

The injection of bichloride of mercury in the treatment of syphilis finds a warm advocate in Dr. Staub, of Strasbourg (*Traitement de la Syphilis*), who specially recommends the albuminous solution of the sublimate. This is not acid, and does not produce coagulation in the tissues. His formula is the following: Bichloride of mercury, 1.25 gramme; chloride of ammonia, 1.25 gramme; chloride of sodium, 4.15 grammes; the white of one egg; distilled water, 250 grammes. One centigramme of this is injected daily, by a subcutaneous syringe, in two injections, one in the morning, the other in

the evening. According to this somewhat enthusiastic author, bichloride so administered is an invaluable therapeutic agent, infallible in the treatment of secondary symptoms, prompt, complete, and devoid of inconvenience.

An Old Remedy for Hydrophobia.

Old remedies are sometimes as good as new ones; and if they have been forgotten by the profession there is just as much merit in bringing them forward as in discovering a novelty. Mr. C. Leeson Prince quotes in the *British Medical Journal*, Oct. 19, from the *Transactions* of the Royal Society for 1685, a note by Mr. George Dampier, praising "a most Noble and Infallible remedy" for hydrophobia. It is the *Lichen cinereus terrestis*, of Ray. This Mr. Prince believes to be the efficient constituent in a secret remedy, which certainly, from his account, has been remarkably successful near Nottingham, England.

We should like some of our readers who are better botanists than ourselves, to inform us of the proper botanical name corresponding to Ray's classification of lichens. Dampier says that it "grows on the ground as close as may be to it, being flat on it; the moss and grass groweth up about and amongst it. To use it, you must dry it in an oven, by the fire, or in the sun, then powder it and pass it through a fine sieve; the which, mixed with the like quantity of fine beaten and powdered pepper, is the composition."

Mr. Prince calls it *liverwort*, but the liverwort of our books, the *Hepatica Americana*, does not answer this description.

The Malign Influence of the Stars.

To cast the horoscope of public health, and read the signs of coming pestilence, blight, famine, and general woes, by perusing the starry vault, calculating the conjunctions of the planets, and this, in a literal sense and sober earnest, is an astonishing plan to defend and advocate in these days; yet a physician of venerable years, Dr. M. L. Knapp, of Mexico, has a long article in the *New York Medical Journal* for October, intended to show that the planetary influences mainly control epidemic visitations and the blights of vegetation. He makes some efforts to explain this on scientific grounds, but *credat Judæus Apella, non ego.*

The Impurity of Seidlitz Powders.

This point was discussed before the last meeting of the American Pharmaceutical Association by Mr. C. W. Grassly, of Chicago. He disclosed the fact that (in many cases intentionally, in most cases from want of proper care), nearly all the samples of Seidlitz powders examined fall below the weight of the U. S. P. standard. In those cases where intentional, there is no excuse, as that is done without any pretence at accuracy; but in the majority of stores the powders are put up by measures which are inaccurate, or soon become so. Even with the most careful persons, it is impossible to fill these measures uniformly, and if the measures were originally correct, they soon, by attrition, wear away and lose their accuracy. Weighing, and giving just weight, is the only remedy. Another source of error in measuring is, that various lots of Seidlitz mixture may vary a little, owing either to fineness of powder, moisture, or compactness of the powder. No ingredients were found as adulterants.

It was stated in the discussion that in London, many years ago, under the name of "Improved Seidlitz Powders," it was customary with certain stores to add one grain of tartar-emetic to each box of powders, and that in a very few stores in this country the same practice was observed.

Dr. Wilks on the Universal Use of Chloral.

This eminent teacher, in his late address before the British Association, indulged in the following sarcastic remarks:—

In the history of the world we see savage nations attempting to exorcise particular pains, having, of course, no knowledge of their cause. At a later period, symptoms are treated; but in proportion to the advances of medicine as a science, is the attempt at a wider generalization being constantly made. If scientific treatment had been at the present day in any way perfected, how were it possible that, within a few years, bromide of potassium, carbolic acid, and chloral, should become in turn universal medicines? If any fact were required to prove the absence of scientific system in the treatment of disease, it would be the universal administration of chloral; every patient has some bodily uneasiness, or is sleepless, and thus presents symptoms suggesting its use. It is a powerful benumber; but benumbing the sensi-

bilities and paralyzing your patient is not curing his complaint. If a man be raving mad, and you knock him down and stun him, he will be quiet, and you may praise highly the dose which you have given him. The practice might thus be developed into a valuable therapeutic agent, and a trained boxer might give blows on the head of different degrees of force according to the strength of the dose ordered by the prescriber. The method would hold rank with the universal administration of chloral, and, in the hands of an expert, might, perhaps, be more safe.

The Chemistry of Tanning.

Distinguished German professors have claimed that tanning is not a chemical but a mechanical operation; that there is not an actual chemical union between the tannin and gelatin, but that the tannin simply makes a minute coating and preservative of the particles of the gelatin and fibrin of the hide; this theory has not, however, met with any general acceptance, although it seems to have some confirmation in the fact that the tannin can sometimes be entirely washed out of hides and skins which have been quickly tanned with terra japonica; there seems to be also, further proof of its correctness in the fact that, by a recently-discovered process, a firm in Paris is now engaged in making glue out of old boots and shoes. We have not sufficient particulars to be able to state exactly what has been done, but we are assured that the operation is a success, that old boots and shoes to be used for this purpose have now a standard price, and that a good article of glue is made from them.

Injection of Ammonia in Opium-Poisoning.

In the *Glasgow Medical Journal*, for August, 1872, Dr. McEwen reports a case of opium-poisoning. Ammonia injected into the veins of the arm restored consciousness to an old man of sixty-nine, who was apparently moribund from a poisonous dose of opium (forty grains) eight hours previously. He was so far recovered as to be able to walk a quarter of a mile to the hospital. After admission there, at 8 A. M., the ammonia injection was not repeated, but three doses of croton oil were administered, and coffee. In the afternoon he became somnolent, and sweated profusely. Belladonna was administered, and a further dose of croton oil; and at 8.25 he died. The effect of the ammonia was so admirable, that it is to be desired that in any other case it should be repeated, as Dr. Halford recommends, to combat relapse.

The Action of Antimony.

From a series of experiments on frogs and other animals, Dr. Radziejewski, of Berlin, comes to the following conclusions in regard to the action of Antimony.—1. The emetic effect of the tartrate of antimony introduced into the stomach is the result of the action of the drug on the mucous membrane of the stomach, and not of its absorption into the blood. The effect of the peculiar irritation of the stomach produced by the substance is, by reflex action, to produce vomiting. 2. The depression of the action of the heart is also a result of reflex action, and not, as some have supposed, a special result of the action of the potassium contained in the tartrate. 3. Antimony has, in addition to its effects on the intestinal canal, also a general action on the organism corresponding to that of arsenic.

The Os Uteri lost in Labor.

A letter of Dr. E. Kennedy, in *The Doctor*, contains the following extraordinary case:—

A patient in her third labor, which was somewhat violent, had slight hemorrhage. The head was well engaged in the pelvis, and some fleshy mass was found to protrude from the vulva. The pains increasing, a complete circular ring, about three-eighths of an inch thick by an inch in breadth, escaped, which, on examination, proved to be the detached os uteri in its entirety. The labor proceeded rapidly. There was very little hemorrhage; and the patient made a favorable recovery, the lochial discharge continuing longer and being more offensive than usual. Of the after-history of this case, and whether she bore more children, I am ignorant.

MARRIAGES.

Craig—Carey.—Oct. 16, at Lime Springs, Iowa, by the Rev. A. Craig, Norman S. Craig, M. D., of Lansing, and Miss Alice S. Carey.

Hawkins—Hart.—Near Rocky Comfort, Arkansas, Oct. 16, at the residence of the bride's sister, by Rev. P. G. Jenkins, W. H. Hawkins, M. D., and Mrs. Dora V. Hart, both of Rocky Comfort, Arkansas.

Moore—Pigman.—At the residence of the bride's father, New Richmond, Ohio, Oct. 23, by the Rev. H. A. Ketchum, of Portsmouth, O., Dr. E. C. Moore, of Detroit, Mich., and Miss Laura O. Pigman.

Sterling—Eldridge.—In this city, Oct. 31, by Rev. T. W. J. Wylie, Dr. John Sterling and Miss Mary D. Eldridge.

DEATHS.

Stewart.—In Pittsburg, Pa., on September 26, of pulmonary hemorrhage, W. W. Stewart, M. D., of Dayton, O., aged forty-six years, five months and twenty-two days.

THE

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Original Department.

Communications.

CLINICAL CASES.

By F. K. Bailey, M. D.,
Knoxville, Tenn.

I. EPIDYDIMITIS.

June 8, 1872. John H., an intelligent colored man of 35; occupation, finisher in a tannery. Found him in great distress from pain in the left inguinal region, and extending all through the hypogastrium.

On examination found the left testis enlarged, inflamed, and exquisitely tender to the touch. There was a hardened and knotty feel to the whole extent of the cord. Bowels just moved from a dose of oil taken a few hours previously. Gave pulv. Dover to be taken every four hours till pain was relieved.

R—Iod. potassii,	ʒiij.	
Bi-carb potassæ,	ʒiss.	
Fluid ext. sennæ,	℥ss.	
Syr. sarsæ compos,	ʒj.	
Tr. gentianæ compos,	ʒiss.	M.

Sig. Teaspoonful four times daily.

9th. Much better; slept well; less soreness; to continue mixture and pulv. Dover P. R. N.

From this time there was improvement from day to day, till Thursday, the 13th, when he called at my office and stated that he had a discharge from the urethra, and, at times, some pain in urinating. Denies having had gonorrhœa or any "bad disorder" in his life, but says that during the late war, while member of a heavy artillery company, he was strained in lifting, etc.

Went to the doctor, who told him he had the "running range." The term running range is very commonly used by the negroes in connection with urethral discharges, and I have no definite idea of its origin. On looking over an old edition of Sydenham's works, printed in 1707, I find gonorrhœa called a "running of the veins," and the term I quoted may be a corruption of the old English term. I find, by the way, that many vernacular expressions in use among the common people here, both white and black, appear to be corruptions of the old English words which have come hither through successive generations, via Virginia and other Atlantic States.

The discharge is gleety, and at night there is a distressing chordee. The swelling of the testis and the appendages subsiding, and the man can do some work in the shop.

Monday, 17th. Injected a weak solution of carbolic acid, and directed him to continue the same mixture and pulv. Dover as before.

Sept. 5th. Have seen this man but once or twice since the 17th of June; but he informs me that his health is improving, although there is occasional soreness in the groin, with pain in urinating.

II. Friday, June 14th. Called to visit B. L., a strong, athletic colored man, whom I found with swollen condition of the left testis, and involving the epidydimus. Complains of great soreness of the parts, with pain extending up the iliac region, from tension of the cord. Disclaims gonorrhœa as incident to his history, and attributes his condition to a strain in lifting a heavy railroad iron some two or three years since.

At times, to the present, there has been lameness and soreness in the groin. There are, at present, enlarged inguinal glands, which are sore upon pressure. Cannot stand upon his feet by reason of pain from weight of the enlarged testis. General health not impaired; bowels open and appetite good. Prescribed iod. potassii in 5-grain doses, and a suspensory bandage.

16th. Very much better; glandular enlargement subsiding; since wearing the bandage can walk without pain. To continue mixture, and to be careful about exerting himself.

22d. Called and found him nearly well. Complains only of soreness along the cord, and pain, unless the testes are well supported by the suspensory bandage. Iod. potassii I have frequently, and may say generally, found efficacious in the reduction of an enlarged testicle, whether from causes apparent in this case, or as a result of metastatic mumps.

MUSCULAR RHEUMATISM.

May 18, 1872. Called to see two boys of unmixed African parentage, aged 12 and 10. George, the eldest, is a stout boy, well formed, and large of his age. Complains of pain in the lower limbs, and of a soreness of the flesh all over the body; pulse 100, quick and tolerably full; tongue coated white except at the tip, which is red; papillæ prominent over whole surface; bowels open from pills I had given him two days previously; urine high colored; can sit up but a few minutes at a time, from feeling of weakness; appetite unimpaired to any extent.

The younger, Sam, complains of every symptom which the other feels, and the case is a counterpart of the other, except that Sam has whooping cough.

℞—Iod. potassii, ʒij.
Bi-carb. potassæ, ʒj.
Syr. ipecac,
Aquæ amygdal amar, aa ʒj
Tr. digitalis,
Tr. sang. canad, aa ʒij.
Fluid ext. sennæ, ℥ss. M.

Sig. Two-third teaspoonful for George; one-half teaspoonful for Sam.

19th. George still complains of pain in thighs and abdominal muscles; bowels not open; tongue still coated; cannot sit up; Has bad night; to continue mixture, and take pulv. Dover every four hours; castor oil nightly.

Sam some easier; bowels open; both to continue mixture and take pulv. Dover.

20th. Sam convalescent; George still about the same; bowels not open; gave calomel and podophyllin, and to continue mixture.

21st. George better; bowels open; less lameness, but complains of lumbar pains; urine very high colored. To take mixture in teaspoonful doses 3 times daily, and to have good diet.

22d. George sitting up, but complains of pain in lumbar region; soreness subsiding in thighs; tongue cleaning; pulse slow; bowels open; continue mixture.

These cases, especially of George, appear to have been of a rheumatic character, involving the muscular tissue. The prostration, with derangement of the kidneys, showed that the system had sustained a shock. The boys had been in the habit of bathing in the river, and loitering about upon the grass, and contracted a cold which culminated as above. The occurrence of two cases so similar in the same family, will confirm my idea of a like origin in each.

REMARKS ON ANÆSTHESIA.

Before the Kings County Medical Society.

The same views having been taught the graduating class of the Long Island College Hospital.

By Prof. J. S. Wight, M. D.

The administration of ether and chloroform is one of the most important subjects that can occupy the attention of the physician. It is important, because one may be called at any time to produce anæsthesia in a fellow being, and because anæsthesia involves conditions of grave danger, and also because there is not as yet any agreement as to the best method of administering ether and chloroform.

When doctors disagree I do not attempt to decide what should be adopted as best. While I hold that every intelligent man has a right to his own opinions, I only claim the same right; and if I cannot sustain my opinions with good and sufficient reasons, I will frankly abandon them, and adopt those which are better.

If there is anything well established in the practice of medicine, it is this, that chloroform is a more dangerous agent than ether. It does not meet the question fairly to say that chloroform properly administered is safe. One may declare that he has never had an accident in giving chloroform,

and yet his next experience may involve the death of a patient. The simple fact stands, attested by almost daily loss of life, that chloroform, even in the most careful hands, has destroyed a great many human beings. On this known danger we may safely say that any one, at any time, may die while under the influence of this potent agent. In fact, I hear men who have grown old in the profession, repeat with an earnest emphasis, that the more they give chloroform, the more they dread its dangers. And this feeling seems to spring from the consciousness that the next victim may fall under any man's hand.

In the next place, ether is exceedingly safe; for it is very difficult to find cases in which this agent has been the cause of death. The fact that death so rarely follows etherization has drawn the attention of many members of the profession to ether as a safe and reliable agent. It would appear, then, that experience has demonstrated the danger of chloroform and the safety of ether. In fact, chloroform as an anæsthetic is being abandoned more and more, and the use of ether is becoming more and more general.

Upon what depend the perils of chloroform? It must be remembered that the vapor of chloroform is heavier than atmospheric air; consequently the vapor of chloroform will sink in atmospheric air. Now it may be asked—will the vapor of chloroform sink in the air that occupies the cavity of the lungs? I am satisfied that it will do so, because if I inhale the vapor of chloroform I can feel it producing a peculiar impression on the whole internal surface of the air cells; and because the quantity of "residual" air is from eight to ten times greater than that of "tidal" air, and would require at least eight respirations to remove it; and because the efforts of inspiration are more energetic than those of expiration; and because the vapor of chloroform, as experience shows, is very rapidly absorbed. Hence it follows that an excess of this vapor sinking into the air-cells of the lungs will remain there constantly, ready to be absorbed. In this way an over-dose of chloroform may be taken into the system, and a fatal result follow before any remedy can be applied. Of course, when the function of the medulla oblongata is not wholly destroyed, artificial respiration may succeed in saving the life of the patient. But the danger that I have just pointed out will, in my opinion, sufficiently explain many of the deaths produced by chloroform.

In the next place it is unquestionably true that chloroform is a heart-sedative; that it will paralyze the heart. And I will admit that chloroform acts on the fibres of the heart-muscle, as some have seemed to demonstrate; and I will also admit that chloroform acts on the blood-globules in the capillary system, as there is abundant evidence to prove; but the important fact is that chloroform is an agent, acting on the nervous system. And among powerful depressing agents, chloroform has a strong elective tendency to the medulla oblongata. An over-dose of this substance will exhaust the reflex function of the medulla oblongata, and thus cause almost instantaneous death. Although the careful and skillful hand may greatly lessen the dangers of chloroform, yet it will be readily seen, from what has just been stated, that the most experienced may meet with deplorable accidents.

I come now to inquire: Upon what depends the safety of ether? Why has it not made as many victims as its more powerful associate? It will produce anæsthesia as well, and often as rapidly. Firstly, ether is a heart-stimulant, it invigorates the muscular walls of the heart, and in this way keeps up the circulation of the blood. It exalts the nerve function that modifies the action of the heart, especially the reflex function of the medulla oblongata. The result of this is that the blood is partially oxygenated through the systemic capillaries of the skin, and thus compensating for the more or less complete exclusion of air from the lungs. Secondly, the vapor of ether is lighter than atmospheric air. It will not, therefore, tend to sink and accumulate in the air-cells of the lungs. Hence, there are two constant factors of safety in giving ether. An irremediable accumulation of the vapor of ether in the pulmonary air-cells is not to be feared, and a fatal sedation of the heart is not to be expected. And now what carries great weight in this matter is, that the best experience sustains the facts above enumerated.

If experience can be relied on, and if my argument be sound, the practical conclusion that follows is this, viz: *Ether should be used in preference to chloroform as an anæsthetic.* In making this statement, I would not wholly interdict the use of chloroform; for there are times when it may be safe and

proper to use this more powerful agent. And the practical rule that I would lay down is this:—*In all cases begin with the administration of ether.* It will almost always follow that the patient will readily and safely come under its influence. I say safely, because death from ether is a very rare thing, and I say readily, because, in the great majority of instances, under proper manipulation, there will be no great difficulty in producing etherization. If there are any patients that cannot be readily etherized, *they may be put under the influence of chloroform.* It is my opinion that such patients, though they are few, are comparatively safe, if chloroform be properly administered. There are two points here of importance; The patient resists ether, and ether stimulates his heart; the resistance to etherization and the stimulation of the heart-muscle make *chloroformism* more safe.

If I have established the points that have been argued thus far, we may draw some practical conclusions which will not agree with the practice of some of our very ablest physicians. My object in doing this is not to disagree, but to find out and adopt the best method of practice.

While many admit the dangers of chloroform and the safety of ether, they advise us to combine these two agents for administration. Some physicians give chloroform first, in order, as they say, "to bring the patient down," when they give the safer, heart-stimulating ether. Please imagine your patient "brought down" by chloroform, and having his lungs full of its deadly vapor; do you candidly think that it would be safe to apply the air-excluding ether-inhaler to his face? Such a procedure is, no doubt, a convenient thing for the operator—a time-saving expedient. But the convenience of the physician is of very little account when it interferes with the safety of his patient.

On the other hand, there are other physicians who combine chloroform and ether and then administer them. The plea for this plan is, that a heart-stimulant combines with a heart-sedative and counteracts its dangerous tendencies. In fact, however, the same objections may be raised in this case as in the other, for chloroform is being introduced into the lungs while the atmospheric air is notably excluded, on account of the ether vapor, which is also going into the lungs, that is, what does not escape by reason of its lightness. But so far as is at present known, ether is not an antidote to chloroform. It follows, therefore, that chloroform may perform perilous work even under the restraining influence of ether.

In order to be perfectly fair and candid, I admit that both of these ways of combining and administering chloroform and ether have been practically tested, in a great many instances, with favorable results. But that risks have been run, and perils have been escaped, and deaths have occurred, can be abundantly proved. Dilute the chloroform as much as you please, and you only dilute the chances of danger; for in some cases a very small quantity of chloroform will suddenly prove fatal.

It undoubtedly follows, from what has been said, *that ether is a very safe agent, and that it should supersede chloroform as an anæsthetic.* And for good reasons I have advised the practitioner, in every case, *to begin with the use of ether;* but if ether fails to produce anæsthesia, then chloroform is a safe and justifiable agent.

And as a sequence of my argument, I have ventured to differ from those who hold it the best practice to precede etherization by chloroformism, or to combine chloroform and ether before administering them.

And finally, I am the more encouraged to maintain the views that I have advanced, because the honest conservatism of the profession is more and more tending, at home and abroad, to this safer method of practice.

Hospital Reports.

PENNSYLVANIA HOSPITAL.

Medical Clinic of J. M. DaCosta, M. D.

Professor of Practice of Medicine in the Jefferson Medical College, etc.

[Reported by Ralph M. Townsend, M. D.]

November 9th, 1872.

Scurvy.

The first case to which I shall call attention is Alexander F., a native of Switzerland, aged forty-two years. He has been three years in this country, principally employed as a clerk. He has never suffered from venereal disease nor rheumatism, and has been a "total abstinence" man. He suffered from the small-pox twenty-three years ago, and five years subsequently he had great vomiting of blood. Twelve years ago he had another such attack, which was

followed by yet another six days previous to his admission into this hospital, which was October 28th, of this year.

We have thus several attacks of vomiting of blood to record, also epistaxis, but of late years his nose does not bleed oftener than two or three times a year. His parents are aged and healthy. In no respect can be traced any hereditary cause for this frequent bleeding. For the last three years he has passed urine frequently and in small quantities.

In 1870 his gums became swollen and spongy, tender to the touch, and bleeding when the teeth were pressed together. His hair fell out, but he suffered from no other sickness, neither had he taken any mercurial. He was at that time traveling in Missouri, and his food was of that varied kind generally supplied by hotels. He has never been in want; never worked in lead. Before he came here he lived in Baltimore, where he lived comfortably, having employment as clerk in a coal yard. He suffered, however, from a certain amount of mental worriment, and his sleep was impaired. With this last named exception he was well. Until two months ago his gums were swollen and bled very easily, and although his appetite was good he could eat no solid food.

Five days prior to his admission into the hospital he found that walking caused him great pain, and one morning he perceived a large spot, or ecchymosis, on his left leg just above the ankle. He had received no injury or fall. He came to Philadelphia, and on his admission to the hospital his face was sallow and puffy; his gums spongy and ulcerated; mouth dry (no signs of salivation); appetite poor; sleep bad and bowels constipated. He had no thirst nor headache. He urinated four or five times daily, and as many times at night. His urine was acid in its reaction, S. g. 1014, but did not contain albumen.

He had pain in both legs below the knee; the left leg was swollen and shiney, and discolored and yellowish from the knee down. On each side of his ankle were large patches of ecchymoses. He was put to bed, and at his own request the *limb* was put in a fracture box and bathed with cold water, as being more easy and acceptable to him. He was also directed to have a mouth wash of chlorate of potash; and in this condition I found him a few days ago.

He is now before you and his case speaks for itself. His gums are still spongy, and it hurts him to press his teeth together. His face is still pale and so are his conjunctivæ; but his face looks better than on admission. His heart beats rapidly, the impulse is sharp and distinct. There is a faint systolic blood murmur at the base. His tongue is pale, not coated, and he suffers from no abdominal pain. The leg is still discolored, as from a bruise. It is not as much so, however, as on his admission. Purple spots are still effused underneath the skin, and he cannot walk on account of the pain. He is at present taking with relief the mineral acids and iron, with chlorate of potassa, locally, for the mouth.

℞ Acid nitro muriat gtt. x.
t. d. in water, after meals.

His diet is varied and liberal, with a plentiful supply of fresh vegetables and lemonade.

This is a curious illustration of scurvy happening without any apparent cause. He has not lived a life of want or privation; and yet, owing to some curious condition of his blood, he presents about as marked a case as you would find on any ship. Scurvy is usually, and very rightly, attributed to want of fresh vegetable diet; and the exclusive use of salt meats will predispose to scurvy. Persons living exclusively upon fresh meat would also become scorbutic, although not as soon as when the salt meats are solely partaken of.

I cannot trace any such cause here, as his diet was varied, and he partook of vegetable food. There seems to be, looking back upon his history, some curious condition as to the state of the blood, no matter what diet he was upon.

We find among army troops, that as long as their *morale* is kept up, and their cheerfulness maintained, so long they will escape scurvy, or have it very lightly. But when there is dull routine, and the men are mentally distressed, it will have a good deal to do with the developing of this disorder.

To this patient's mental distress I attribute, in part, his last attack, although this scorbutic blood taint seems to have pursued him all his life. The symptoms grouped here are typical; the condition of the gums, the pale, smooth tongue, and the anæmic eye, all belong to the history of the disease. The spots near the joints are also diagnostic of scorbutic patients. These are the cause of this man's trouble in walking; and we often find them giving rise to apparent malformation, as for instance, the contraction of certain groups of muscles.

I have spoken to you of a scorbutic diathesis, and of an altered state of the blood. What is the state of the blood in these cases? We find it lessened in density and fibrine; but accurate chemical investigation is yet wanting to develop the full extent of change that occurs. Scurvy was at one time attributed to a want of the potash salts, but this doctrine cannot be maintained, and the most accurate observations prove it to be fallacious.

Pains in the limbs, as we have in this case, and back are prominent symptoms of scurvy. During the late war, I saw many cases in which pain in the back, with the exception of the state of the gums, was the only distinctive symptom. We must remember this manifestation of a scorbutic state of the symptom: otherwise, we might judge our patient simply to suffer from muscular pains, or to be a malingerer. Scurvy, in private practice, is so rare a disease, that some physicians have never seen it.

This man is rapidly recovering. His treat-

ment will be continued, laying great stress on his vegetable diet and his lemonade.

Malaria.

Cases two and three come together, both suffering from malarial disease. I show them to you because they both present typical malarial faces, viz: slight yellowish tinge of skin, clear conjunctiva, and slight emaciation.

The first case, Matthew W., had his initial chill three weeks ago. It happened in Wilmington, Del., and was the first malarial chill he had ever had. The first attack was subdued in a few days, and now he suffers from a second. He has quotidian intermittent with albuminuria as a prominent symptom. The latter is not a frequent complication, nor yet very rare. The state of blood which co-exists with malaria favors dropsy. Examination of this man's urine revealed no tube-casts; the s. g. was 1012; and the amount of albumen was not great. This, you must remember, was only the first examination; later ones may reveal casts.

We do not hesitate to predict for this man a speedy recovery. Even in marked cases of malarial albuminuria we find it among most favorable forms of Bright's Disease. Absence of tube-casts in the urine is more favorable than when they are present; but we generally find a few. This is valuable information in a prognostic view.

Both these men are taking quinine. Both had their last chill on Tuesday, four days ago. Three days ago they were taking twenty grains of quinine daily, this last day they have taken sixteen grains. They also take five drops of nitro-muriatic acid three times daily. This treatment will be continued with the addition of two grains of reduced iron after meals. They will have good food. In a few days the quinine will be reduced to eight grains; but the iron will be continued.

Medical Societies.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

[Reported by J. W. P. Bates, M. D.]

The Relations existing between Physician and Druggist.

By T. B. Evans, M. D.

The nature and character of the relationship existing between the physician and the pharmacist has been, for some time past, the topic of discussion between prominent gentlemen representing each profession. A great deal of acrimony has been developed, crimination has followed, and recrimination has not been found wanting. I shall indulge in no harsh language. The pharmacist is too potent an ally to handle quite so roughly. He has rights which should be respected, and he, of all men, should be the last to infringe the rights and privileges of the physician. They should both be, as they rightly are, co-workers in the cause of humanity; brothers, with equal rights and common privileges, moving together, each in their own particular lines of duty, toward the same objective point—the relief of the disease stricken sons and daughters of our mother earth. The physician should be the head and front in all matters connected with the practice of his profession; the pharmacist and nurse are his natural allies, to him subservient, and must move in accordance with his commands. This should be so, for in case anything goes wrong in the combat with disease, the physician alone must suffer and bear the ignominy of defeat, when too often his allies have been the cause thereof.

The competition in business has induced some pharmacists to sell their drugs cheaper than those who charge a fair and living price, who compound their prescriptions faithfully, and endeavor to obtain pure medicine. The former make their preparations less than the officinal strength, and buy drugs of the lowest kind, that they may thus be enable to retail them at lower rates than their more conscientious neighbors, and bring custom to their stores.

Such men are guilty of murder in the first degree. The man that would dispense impure medicines to a sick and suffering fellow being is deserving of the severest condemnation and punishment that it is possible to inflict. To take from a disease-stricken brother his only hope of relief, to dash from his trembling lips the balmy potion of hope, and place instead a miserable compound born of greedy, palsied gain, is something from which the souls of all honest men recoil with horror; yet it is done in your midst.

Some time since a physician in this section of our city was called upon to visit a gentleman, suffering from intermittent fever. He administered the usual remedy, quinine, writing for twenty-four grains, and assured his patient that he would miss the expected chill. The prescription was compounded by an adjacent druggist, the medicine given as directed, and the chill came at the usual time. The physician was somewhat nonplused, but ordered the renewal of the medicine. The result was as before. A third time it was renewed, and a third time the chill returned. The doctor again ordered the same quantity of quinine, but directed the prescription to be procured at another store. It was done, and the chill did not return. The physician, in order to satisfy himself in regard to the original prescription, obtained the box in which the pills were and sent it himself to the druggist who first compounded them, to have them again renewed. When they came he crushed one of them between his teeth in order that he might detect the delectable bitterness of his well-tried friend, quinine, but it was not there. He tried another, and another, but still could not find the slightest resemblance to his gall-like friend. He stood not upon the order of his going, but went at once to the apothecary and charged

him with deceit and knavery. The case was so plain, that there was not one grain of quinine in any of the prescriptions that he had compounded, that the apothecary finally acknowledged the truth of the charge, and prayed that the doctor would not expose him. He said that his assistant, a boy, had put up the pills in the first instance during his absence, and had used pulv. gum acaciæ instead of quinine. He discovered the error when he came in, but as the pills were ordered to be renewed over and over, he supposed they were doing what the doctor expected them to do, and he was afraid to put them up correctly for fear some damage might be done to the patient. Sound logic, truly! That druggist still carries on his trade, but I hope he has learned a lesson that will deter him from such pharmaceutical rascality in the future. I would not have you, gentlemen, think that there are many such characters loose among the pharmaceutical fraternity, but there are some, and it becomes you as medical men to see to it that your very best efforts are not set at naught by such conduct as above described.

The practice that is pursued by many druggists, of renewing a physician's prescription without his written order for the same, is another piece of injustice and wrong-doing that smacks of dishonesty. He is not the owner of the prescription he compounds, but merely the custodian thereof, and is allowed to retain and file it for his own protection so that if any damage is done he has in his own hands the proof that it was ordered and he cannot be held responsible. He has no actual right to the prescription at all, but custom has allowed him to retain it. It is the property of the physician who writes it, and neither the apothecary nor the patient has any right to renew it without the doctor's consent. I have known a prescription pass through a dozen different hands. I know a lady at this times who has the reputation of curing scrofula in its worst forms, and has a number of patients under her treatment. She was cured of scrofula herself, after suffering a number of years, by using a prescription ordered by Prof. N. R. Smith, and she has had that renewed several times a week, for which she gets two dollars from those she is treating. Now what right has that apothecary to peddle Dr. Smith's brains around in that style? That prescription was, no doubt, the result of long years of study and experience, and the remuneration should go to him who devised it, but instead of that, the apothecary enables this woman to use him as a means of a peddling operation which pays him and lines her purse well at the same time. I call this dishonesty. It is stealing Dr. Smith's property, and appropriating it to their own use and benefit. This act is not only dishonest to the doctor, but criminal towards the patient. I write a prescription for A, after an examination of his symptoms, his temperament, his pulse, his idiosyncrasy, and the probable cause of his sickness. The remedies prove effectual. Now come B, C, and D, who have what they suppose to be a disease just like A's. If they make use of the same remedy it may, on account of different temperaments and constitutional peculiarities, do them a great amount of harm, and the effort made to cheat the physician out of his fee may result disastrously. And to make matters worse the doctor is held to as strict an accountability for the action of one of these borrowed, or rather stolen, prescriptions as if they had paid him for a thorough examination. If the medicine fails his reputation suffers.

The practice that some apothecaries have of going out of their province and prescribing for the sick over the counter, is also another matter that must meet with condemnation from us. What right have they so to do? Has their education fitted them for any such course? They are simply compounders and dispensers of medicine. That is their legitimate business, and, if they have been properly educated, it gives them no knowledge of the proper application of these medicines to the cure of disease. As well ask a printer who prints the laws of the land to defend you in a lawsuit. The practice of medicine, or the application of remedies to disease, is quite a different thing from simply compounding what has been ordered. It is difficult for those who have spent a life-time in the practice of medicine always to select the proper drug, and how much more difficult must it be for those who are ignorant of the laws which govern the animal organization. Every man to his trade, is the rule that should be followed. No one in want of a pair of shoes goes to the tanner and dresser of hides for them: no one in need of a coat goes to the weaver for it. In the late Wharton trial Prof. Aiken, although a good chemist, and well versed in all that pertains to drugs, and a teacher in a medical college, was not allowed by the judges to give his opinion concerning the action of a certain drug, because he had not practiced medicine long enough to give weight to his opinion as a medical expert. This practice of druggists must be wrong. It is injurious to the sick, and capable of doing a very great deal of mischief to the science of medicine itself.

Another matter. Go into the business places of the majority of druggists, and you will find their shelves well stocked with all the patent nostrums and cure-alls with which the country is flooded. Every one of these compounds bears upon its face the badge of knavery and lying. We take it that it is wrong for the finished pharmacist to sell them. He is *particeps criminis* if he enables the proprietors of these nostrums to use him as the medium of their introduction to the public. The fact of their being upon his shelves gives them the air of respectability. If he would refuse to sell them not half so many would be sold, the public would be benefited thereby, and the revenue that properly belongs to the physician would not find its way into the pockets of men who

care not whether they do harm or not, so they line their pockets with greedy gold.

Self preservation is the first law of nature, and it becomes us to see that our rights are not infringed. See to it that your prescriptions go to those establishments which uphold the dignity of the medical profession. It is our duty to uphold the hands of those who are for us; and it is right and proper that we should not countenance those who practice medicine and pharmacy and are at the same time venders of patent nostrums.

A large number of gentlemen participated in the discussion, and a number of instances were related in illustration of the evils complained of by Dr. Evans.

As a result a committee was appointed to consider the question and report the best means of protecting the profession in its rights.

MEDICAL SOCIETY OF WHEELING.

At the annual meeting of the Medical Society of the City of Wheeling and County of Ohio, West Va., held at the residence of Dr. Hupp, on Friday evening, Nov. 1st, the following gentleman were elected officers for the ensuing year, viz:—President, Dr. R. W. Hazlet; Vice-President, Dr. Jas. Cummins; Secretary, Dr. S. L. Jepson; Treasurer, Dr. J. C. Hupp; Censors, Dr. E. A. Hildreth, Dr. R. H. Cummins, Dr. W. J. Bates, Sr. Dr. F. Julius Le Moyne, of Pennsylvania, and Dr. I. Weirich, of Ohio, by invitation participated in the discussions.

Editorial Department.

~~Periscope~~.

How to Determine the Quantity of Urea in Urine.

Dr. Geo. B. Fowler, of New York, says in the *New York Medical Journal* :—

In 1854, Dr. Davey, of England, published in the *Philosophical Magazine* the description of a method devised by himself for estimating the quantity of urea in a given solution.

This analysis depends upon the decomposition which occurs from the union of the hypochlorites of soda, potash, or lime, with urea, where the urea gives off its nitrogen, which being collected is measured, and the quantity of urea originally present estimated.

The simplicity of this method at once recommended it to general favor; but a question immediately arose as to its accuracy, to which is due the fact of its being little known and practiced. I therefore thought it worth while to endeavor to ascertain if this easy method does yield reliable results.

The following are Dr. Davey's directions: "A strong glass tube, about twelve or fourteen inches long, closed at one end, and its open extremity ground smooth, and having the bore not larger than the thumb can conveniently cover, holding from two to three cubic inches, each divided into tenths and hundredths by graduations on the glass, is filled more than a third full of mercury, to which, afterward, a measured quantity of urine to be examined is added, which may be from a quarter of a drachm to a drachm or upward, according to the capacity of the tube; then holding the tube in one hand near its extremity, and having the thumb in readiness to cover the aperture, the operator fills it completely full with a solution of the hypochlorite of soda, taking care not to overflow the tube, and then instantly covers the opening tightly with the thumb, and having rapidly inverted the tube once or twice to mix the urine with the hypochlorite, he finally opens the tube under a saturated solution of common salt and water, contained in a steady cup or mortar. The mercury then flows out, and the solution of salt takes its place, and the mixture of urine and hypochlorite, being lighter than the solution of salt, will remain in the upper part of the tube, and will therefore be prevented from descending and mixing with the fluid in the cup. A rapid disengagement of minute globules of gas soon takes place in the mixture in the upper part of the tube, and the gas is collected and retained. The tube is then left in the upright position until there is no further appearance of gas being formed, the time being dependent on the strength of the hypochlorite and the quantity of urea present, but the decomposition is usually completed in from three to four hours; it may, however, be left much longer, even for a day, if convenient, and having set the experiment going, it requires no further attention. When the decomposition is completed it is only necessary to read the quantity of gas produced off the scale on the tube. In cases where great accuracy is required, due attention must be paid to the temperature and atmospheric pressure, and certain corrections made if these should deviate from the usual standards of comparison, at the time of reading off the volume of gas; but in most cases sufficiently near approximations to accuracy may be obtained without reference to these particulars."

Dr. Davey recommends the use of the hypochlorite of soda, as it is a preparation easily

obtained under the name of liquor sodæ chlorinatæ, or Labarraque's solution, and it moreover does not soil the sides of the tube as do the others. Dr. Flint, Jr., in his book on the "Chemical Examination of the Urine," speaks particularly of the importance of employing the French Labarraque, as the American is unreliable. When I came to inquire, several preparations of the American Labarraque were presented to me, which in the experiment yielded different results. I found also a number of French or imported articles, which too were unlike in quality. It therefore became of the first importance to select a preparation of the hypochlorite of soda of the most reliable manufacture, one, the strength or quality of which would not vary, and one generally kept by chemists. Squibb's liquor sodæ chlorinatæ answered my purpose so far as the above requirements were concerned, and it only remained to test its value in connection with Davey's method. I procured a cubic inch tube and made several analyses. In each of them I failed to collect, according to the graduations on the tube, sufficient gas to correspond with the known quantity of urea introduced. But, observing that the same amount of gas was present in every case, the urea being the same, I was led to doubt the accuracy of the tube, and upon examination it proved to be inaccurate, its capacity being greater than the graduations indicated. Finding it impossible to obtain one in the city of any different manufacture, I resorted to a cubic-centimetre tube of French make, which was correctly measured and marked. With a cubic-centimetre tube, therefore, the following experiments were made —in each instance, however, the results in cu. cent. were converted into cu. in. simply by multiplying the number of cu. cent. of gas obtained by .06103, because one cu. cent. = .06103 cu. inches.

By calculation, the fifth part of a grain of urea should furnish .3098 parts of a cubic inch of gas at 60° Fahr. and 30 bar. Dr. Davey employed one-fifth of a grain in two experiments; in one he obtained .3001, and in another .3069 cubic inches, the variation being only in the thousandths of a cubic inch. The final result is obtained by the process of the Rule of Three. A grain of urea should furnish 1.549 cubic inches of gas, then 1.549 : vol. gas found :: 1 : answer. In short, divide the volume of gas found by 1.549, and the answer will be the amount of urea in grains.

Catarrh of the Female Genital Organs.

In a paper on this subject, quoted in the *Practitioner* by Prof. Hildebrandt, of Königsberg, he remarks that simple catarrh of the vagina is of rare occurrence; the seat of the affection is much more frequently to be sought in the uterus and its appendages, but often also in the commencement of the genital canal, the vestibule. In forming the diagnosis the following points have to be attended to. 1. The microscopical examination of the secretion. When there are albuminous tenacious glutinous masses with numerous mucous corpuscles, the cervix is affected; the appearance of large quantities of ciliated epithelium indicates disease of the corpus uteri, and perhaps of the Fallopian tubes. When columnar epithelial cells are in great abundance, there has been protracted catarrh of the mucous membrane of the cervix. The microscopical elements of vaginal catarrh consists of cloudy glutinous serum with pavement epithelium, infusoria (*Trichomonas vulvæ*, elongated bodies with two whip-like processes) and fungi (*Leptothrix vaginalis* and *Oidium albicans*). 2. The chemical evidence. A secretion, which reacts strongly alkaline, belongs to the cervix: the pure secretion of the vagina is always acid, the secretion of the corpus uteri is neutral.

3. Ocular inspection. Amongst the various forms of specula the tubular white glass (milch glas) speculum of Karl Mayer, and the silver speculum of Ferguson with obliquely cut ends, are the best. Sims', he thinks, on account of requiring two assistants, are indelicate and cause pain. In most instances the origin of the fluor albus is the portio vaginalis. In virgins the vaginal portion will be found elongated, swollen in the upper parts, and of a dark red color; around the os, there are circular patches when the epithelium is lost and where ulcers have formed, and from it a plug of mucus projects. In women who have had children the vaginal portion is cylindrical and dark red; the broad, somewhat everted lips are eroded, the finger introduced into the cervical canal finds the mucous membrane swollen with knobby granular elevations consisting of the hypertrophied glands and papillæ. The consequences of catarrh of the cervix vary in the virgin or childless woman and the multiparous female. In the former the quantity of blood lost in menstruation is increased,—in consequence of the congestion present: intercurrent hemorrhage also occurs. The external orifice becomes contracted, and the stagnating secretion of the cervical glands distends the canal of the cervix, and at a later period the cavity of the uterus itself. From time to time the secretion is discharged from the thin-walled and flaccid uterus with pains resembling those of labor. The uterus yields to the pressure of the superincumbent viscera and falls backwards: so that a retroflexio uteri is not an uncommon sequence of uterine catarrh. Such women are almost invariably childless; since through the swelling of the plica palmata and the bending of the uterus the transmission of the spermatic fluid is arrested. Other associated secondary symptoms are, cardialgia; loss of appetite, vomiting like that of pregnancy, which last is not unfrequently dependent upon cervical disease, and especially ulceration; irritation of the bladder, with strangury and neuralgia of the uterine nerves, due to friction of the sore os uteri against the posterior walls of the vagina, on which account the patients avoid taking ex-

ercise and recline much upon the sofa. A very large proportion of obstinate cases of chlorosis and hysteria owe their origin to neglected catarrh of the cervix. A different series of phenomena occur in women who have borne children, and in whom the cervical canal is dilated and the passage free. The constitution here suffers only in consequence of, and in proportion to, the amount of albumen eliminated. Ulcerations of the os, when the catarrh is of long duration, are constant, appearing first on the anterior lip, as the longer one, and as most exposed to the discharge of the alkaline secretion, and sooner or later little tumors occur upon these ulcerated surfaces. These sometimes consist of glands imbedded in the mucous membrane, which hypertrophy and grow into long-stalked mucous polypi containing cyst-like cavities and varying in size from a bean to a cherry. Sometimes the tumors are composed of hypertrophied interglandular connective tissue, forming broad-based swellings. These are injurious to the patient only in consequence of the constant serous discharge from the cervix and the irregular menstruation they occasion. The so-called papillary form of growth is of a much more serious nature, not unfrequently degenerating into cancroid.

In most cases cervical catarrh is established during pregnancy or delivery; which even when quite regular is accompanied by a certain degree of it, especially during the last few weeks. The superficial erosions that then occur usually heal up during the puerperal state; but, when there is a want of cleanliness, or compulsory exercise is taken, as at the sewing machine, or when there is a fœtid discharge from the uterus, the slight ulcerations extend and deepen. Masturbation, and the use of the sewing machine with treadles, produce an amount of friction of the labia and clitoris that leads to the catrrrh. Constitutional affections may also induce it; amongst these scrofula and tuberculosis are most common.

Management of Retention of Urine.

Dr. John Gouley writes to the *American Practitioner* :—

In this complaint I have for many years used slender probe-pointed shafts of whalebone, of the length of ordinary bougies, and from half to two-thirds of a millimetre in diameter. The points of these delicate instruments retain the shape given them provided they be dipped into boiling oil and suddenly cooled in water. The mode of using them is briefly as follows: after having explored the urethra with a bulbous bougie and ascertained the seat of obstruction, the urethra should be filled with warm lard or olive-oil; then if the stricture be eccentric, a bougie with Bell's bend is introduced, with the point directed toward the floor of the canal, in order to avoid entering the *lacuna magna*. The direction of the point may be changed as soon as it has passed beyond the lacuna; but should it enter another lacuna it should be a little withdrawn, turned aside, and carried along until it encounters the final obstruction. From this moment it becomes an explorer in search of the orifice of the stricture, to find which is not, as has been asserted, "a mere matter of chance," but a procedure requiring very light fingers, with great delicacy of touch, and much experience and skill. To be sure of entering the mouth of a narrow eccentric stricture the point of the bougie should be kept in contact with the urethral wall, while a slight back-and-forth movement is given the instrument until the stricture is entered or the whole circumference of the canal is explored. The instrument should be bent at both ends in exactly opposite directions, that the distal may indicate the position of the vesical extremity, and consequently the situation of the orifice of the stricture. After the bougie has passed the stricture it should be movable back and forth; otherwise it is almost certain that its point is caught in one of Cowper's ducts, or in one of the many enlarged lacunæ in the ampulla behind the stricture, or in the utriculus, or else in one of the ejaculatory ducts.

At this stage of the proceeding it is necessary to exercise much caution and gentleness in disengaging the instrument from its faulty position, as any undue force will give rise to a false passage or excite inflammatory action, which may extend to Cowper's gland or to the testicle. These accidents are just as liable to occur from the use of ordinary capillary bougies. By withdrawing the instrument a quarter of an inch, or even less, and giving it a slight rotary movement to change the direction of its point, and then pushing it gently onward, the obstacle will be surmounted and the bladder entered, which is known by the freedom of the point of the bougie on repeating the back-and-forth movement. Having reached the bladder, the bougie serves as a conductor upon which a peculiarly-constructed sound is made to glide and dilate the canal, and also straighten it if the stricture happens to be tortuous.

This last-named instrument was devised by me in 1864, and I have since used it very much and with great success. It is a grooved and conical steel sound, with a canal one eighth of an inch in length at the vesical extremity, and with a curve equal to one-fifth of the circumference of a circle three and a quarter inches in diameter. The smallest (No. 3) is one and a half millimetres in diameter at the point. I have had larger ones (to No. 15) made to fully dilate strictures complicated with false routes, and have named them *tunneled sounds*. When a capillary whalebone guide has been passed through a tortuous or an eccentric stricture and has entered the bladder, the free end is slipped through the tunnel of the smallest sound, which is carried down to the obstacle, precaution being taken to keep the guide in the groove of the staff, held in firm contact with it, and in a few moments the instrument

will be got through, but no force nor undue pressure should be used. It is desirable, after having accomplished this much, to carry on dilation rapidly at the same sitting, to four or five higher numbers, to guard against the possibility of retention of urine from too great inflammatory swelling, and then to relieve the distended bladder by means of a tunneled catheter. The stricture should afterward be treated by gradual dilatation, and no other method should be thought of unless dilatation should fail after a thorough trial.

Uses of Chlorate of Potassa.

Dr. Dodge said, in the last meeting of the Minnesota State Medical Society, Chlorate of Potassa, we think, has a specific action on mucous membranes, the glandular and cutaneous systems. What that particular action is, or the modus operandi, we prefer to leave to more theoretical minds. We term its action alterative, because that term coincides with our ideas of its action, viz: that its salutary effects are produced by its being absorbed and coming in contact with the diseased tissue, as chlorate of potassa, changing the morbid action into healthy.

Theories are very fine on paper, but the practical physician seeks for facts, and these he frequently finds in direct opposition to the most ingeniously framed theory of the fanciful mind. In diseases of the mouth and throat, whether inflammatory or ulcerative, chlorate of potassa has a salutary effect. When administered at short intervals for twenty-four hours the inflammation diminishes, as will be seen by the paler hue of the surface, less vascular turgescence, and diminished sensation. If ulcerative, the ulcers assume a healthy action and the fetor is removed. In diphtheria it is one of the most reliable remedies for the lesion in the throat. In no disease is its alterative action better shown. Give to an adult tablespoonful doses of the saturated solution every hour for twenty-four hours, and there will be a marked change in the general appearance of the diseased parts. The exudation will be diminished, the fetor removed, surface paler, the swelling diminished, the vascular action less, the sensation ameliorated, the skin becomes cool, the pulse less frequent; in fact a large per cent. of the incipient form of diphtheria requires no other remedy.

This may seem a very strong assertion, but from my experience in the treatment of this disease in a severe epidemic, which prevailed in 1864, in the central portion of New Hampshire, an epidemic which assumed all of the forms, from a mild sore throat to the most malignant, sometimes overpowering the system in a few hours or laying the patient prostrate from loss of nerve power, I found no remedy that served me as well as did the chlorate of potassa, given either alone, or, when required, in connection with other remedies. When it has failed I have not thought it a fault of the remedy, but that I did not administer it early enough, or was not persistent, or my dose too small. In scarlatina anginosa, as well as in diphtheria, the administration of the chlorate will be found beneficial, given either alone or in connection with other remedies.

Not only in idiopathic diseases affecting the mouth and pharynx do we see its beneficial results, but also in syphilitic affections of those parts. We find in Braithwait's Retrospect a report of a case of chronic syphilitic ulcers on the leg, of long standing, which had resisted the influence of all the remedies usually employed, but yielded readily to the chlorate of potassa. A case of rupia syphilitica which fell into my hands, after being treated by several professional men of more eminence than myself, yielded to the administration of chlorate of potassa with tonics, and the application of stimulating ointments.

From what has been said of its action on the throat, should we not expect similar results from its administration upon the mucous membranes of other localities? In fact, we have proof of its remedial action in some forms of ulcerative action of the os uteri, and nasal passages; also when inhaled it frequently acts beneficially on the air passages.

The most pleasing results are seen when chlorate of potassa is given in ptyalism. And here we meet another of that class of medicinal agents, which administered either in connection with or alternate, does not destroy the effects of the remedy given, but counteracts the morbific action. For example, when opium is administered, or any of its preparations, its bad effects may be prevented by administering bromide of potassium at or near the same time. If a patient is suffering from nausea, vomiting, or vertigo, the result of opium, it is readily removed by the bromide of potassium, and the anodyne and soporific action of the opium are not impaired but rather increased.

The first action of mercury on the system is that of a stimulant to the mucous membranes and glandular structure, shown by an increased discharge of mucus and more abundant flow of the saliva and bile. This primary effect may be salutary, but if carried too far it becomes morbific, and then we find that the whole mucous membrane and glandular system is diseased, the secretions are abnormal, and we have the disease known as ptyalism.

Here we have just the condition for the administration of chlorate of potassa; in fact it is the remedy employed by a large portion of the profession.

On what grounds is it employed? Does it act chemically on the mercury? If chemically, there must be new compounds formed with the mercury and chlorate of potassa; each of the new compounds has the same base as before, viz: mercury and potassa. But all the preparations of mercury produce ptyalism. Why should not the new compound still more aggravate the disease? If there is a chemical change, where does it take place, in the solids

or fluids? For none will doubt but both remedies are taked into the system, hence it must take place in one or the other, but it does not seem reasonable to suppose that the tissues are continually undergoing chemical change regardless of any vital law.

If in the fluids, or in other words, the circulation, and here we must ignore all vital laws, convert the heart and blood vessels into one grand retort, who can tell the changes and reactions that will take place after each dose of medicine? How shall we graduate our doses, so as to produce the desired chemical change? Again, does it follow that salts which are incompatible in the laboratory should still continue to be so when taken into the system, and have become subject to different influences and laws? But, from experiments made by Dr. O'Shaughnessy and others, chlorate of potassa passes undecomposed into the urine. Therefore there can be no chemical change, which we believe to be true; then chlorate of potassa must act directly as chlorate, and its action be alterative.

I think it has become a common practice with the profession to give the chlorate of potassa to remove ptyalism, but I must go still further and say that it should always be given as a prophylactic, whenever it is necessary to give the mercurial for any length of time. Ptyalism is not the salutary effect of mercury, any more than the discoloration of the skin from the long continued use of nitrate of silver, or the colic produced by the continued handling of lead; but morbific and uncalled for in the treatment of any disease; and it must be mortifying to any respectable practitioner to have a patient exhibit to him a swollen, ulcerated, fetid mouth, the result of his gross negligence, or abuse of one of the best of remedies in the whole materia medica; an abuse which has done more to establish that species of quackery known as homœopathy than all the rest combined. It has been my practice for the last three years to administer the chlorate of potassa in connection with a mercurial, whenever I desired to give the latter for any length of time. I do not administer the chlorate at the same time that I do the mercurial, but at longer intervals, and nicety of dose is immaterial, a small quantity is sufficient. I cannot see but that I obtain the therapeutical effects of the mercurial as readily as before I gave the chlorate. For instance, in chronic congestion and induration of the neck and os uteri, I have found it necessary to administer some one of the preparations of mercury for some weeks, and I have always given my patients chlorate of potassa once or twice a day while taking the mercurial, and never have I failed to obtain the effects of the mercurial, viz: removal of the disease, or discharges from the bowels peculiar to the action of mercury. In secondary and tertiary syphilis I have employed the same agents with similar results.

But still more in active inflammation, when I have given repeated doses of calomel at short intervals, with an occasional dose of the chlorate, I have obtained the desired effect of the calomel, but never produced the slightest symptoms of ptyalism.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Among recent English publications of medical interest may be mentioned *Change of Air and Scene, with Notes of Excursions for Health to the Pyrenees and the Watering-places of France*, by Dr. Alphonse Donné; *Nursing the Sick*, by Dr. Æneas Munro; *Illustrations of the Influence of the Mind upon the Body*, by D. H. Tuke; and, in intimate connection with health and disease, *The Water Supply of Cities and Towns*," by William Humber, and (a second edition) Samuel Hughes' *Water-works for the Supply of Cities and Towns*, with a description of the principal geological formations of England as influencing supplies of water.

——Wm. Wood & Co., have in press, and will shortly publish, *An Epitome of Legal Chemistry*. This is a guide to the discovery of poisons; the examination of fire-arms; the analysis of ashes; the alteration of writings, etc.; counterfeit metal and coin; the adulteration of food, and the identification of stains: chemico-legally considered, for the use of physicians, lawyers, chemists, etc., etc., by A. Naquet; translated with notes by an American editor.

——Lindsay & Blakiston announce:—

Biddle's Materia Medica. Fifth revised edition.

Hewitt's Pathology. Diagnosis and Treatment of the Diseases of Women. From the third London edition.

Trousseau's Clinical Medicine. Complete in two volumes. Octavo.

Athill's Clinical Lectures on Diseases of Women.

Robert's Hand-Book of the Practice of Medicine.

——A magnificent work on the nervous centres has been commenced by Dr. J. Luys. It is entitled *Iconographie des centres nerveaux.* It will embrace seventy photographs, and will be completed in four numbers, each containing seventeen or eighteen photographs. The price will be 30 francs each number.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 16, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

DOES MARRIAGE PROLONG LIFE?

It has generally been conceded by statisticians that marriage in itself prolongs life, when considered in a large scale. Various direct reasons are given for this, traceable, generally, to the benefits derived from the regulated and normal exercise of the generative functions.

Lately, however, HERBERT SPENCER has attacked this view. In a recent essay on the uncertainty of many such researches, he says:—

I will confine myself to the less conspicuous fallacy in the comparison between the mortalities of married and celibate. Clearly as the figures seem to furnish proof of some direct casual relation between marriage and longevity, they really furnish no proof whatever. There may be such a relation; but the evidence assigned forms no warrant for inferring it. We have but to consider a little the circumstances which, in many cases, determine marriage, and those which in other cases prevent marriage, to see that the connection which the figures apparently imply is not the real connection. Where attachments exist, what more frequently decides the question for or against marriage? The possession of adequate means. While some are so reckless as to marry without means, yet it is undeniable that in very many instances marriage is delayed by the man, or forbidden by the parents, or not assented to by the woman, until there is reasonable evidence of ability to meet the responsibilities. Of those men whose marriages depend on getting the needful income, which are the most likely to get the needful income? Those who are best, physically and mentally; the strong, the intellectually capable, the morally well balanced. Often bodily vigor achieves a success, and therefore a revenue, which bodily weakness, unable to bear the stress of competition, cannot achieve. Often superior intelligence brings promotion and increase of salary, while stupidity lags behind, in ill-paid posts. Often caution, self-control, and a far-seeing sacrifice of present to future, secure remunerative offices that are never given to the impulsive or the reckless. But, what are the effects of bodily vigor, of intelligence, of prudence, on longevity, when compared with the effects of feebleness, of stupidity, or deficient self-control? Obviously the first further the maintenance of life, and the second tend toward premature death. That is, the qualities which, in the average of cases, give a man an advantage in getting the means of marrying, are the qualities which make him likely to be a long-liver, and conversely.

We frankly say, however heretical or weak it may sound in the ears of many admirers of this eminent philosopher, that we cannot persuade ourselves to have very profound confidence in what HERBERT SPENCER writes. He is a supporter of brilliant paradoxes. His philosophy finds all things easy, and readily explains all things, for it takes cognizance only of most superficial phases. Any remote and subtle relation is simply ignored. Take this philosophy as it is applied to sociology, natural science, style of composition, art, mental phenomena, or what you will, for its master has omitted none of its applications, and the ease and facility with which it unlocks you the darkest mysteries of art or nature reminds one of nothing so much as an adroit and dexterous juggler, who astonishes you with his sleight-of-hand performances, and winds up each startling trick with his cant cry, "Easy, gentlemen, easy."

Let us look at another view of this same question of longevity in marriage. M. BERTILLON, of Paris, has lately consulted the registers of the only three countries in Europe which were carefully enough kept to give him a reply to his question, those of France, Belgium, and Holland, and shows that if the male sex be first considered, we find that from 25 to 30, 1000 married men furnish 6 deaths; 1000 unmarried, 10 deaths; and 1000 widowers, 22 deaths. From 30 to 35, of 1000 married men, 7 die; of 1000 unmarried men, 11½ die; and of 1000 widowers, 19 die. From 35 to 40, of 1000 married men, 7½ die; of 1000 bachelors, 13 die; and of 1000 widowers, 47½ die; and so on at all the following ages, the married man continues to live with greater facility than the bachelor. It has been said that since the most fortunate men can afford to marry, it is not astonishing that these persons should live longer. But this will not, of course, account for the very great mortality of widowers at all ages, which, indeed, surpasses that even of bachelors.

However, it must be noticed that 8000 young men marry in France yearly, under the age of 20. This is very fatal to such young men, for M. Bertillon finds that, whilst 1000 young men from 15 to 20 furnish 7 deaths, when unmarried, no less than fifty deaths occur among 1000 young married men under 20. Hence *premature* marriage is the surest way to old age.

Women seem to reap less advantage from marriage than men, and there is but little difference in the mortality of unmarried and married women before the age of 25. It is but little marked even between 25 and 30.

The conclusion of these statistics is that marriage is an element of health much more powerful than has been supposed; that it exercises its salutary influences especially on the male in the age of vigor, and on the female in her declining years. A calculus of probabilities shows that the man who marries between 20 and 25 has 40 years to live in place of 35, and that the young woman who marries between 20 and 25 has 40 in place of 36. Criminality, suicide, and insanity are far less common among the married than the single.

NOTES AND COMMENTS.

On French Surgery and Practice.

The Paris correspondent of the *British Medical Journal*, himself a French physician, indulges in the following severe strictures on his national practice :—

The filthy system of dressings, the poisonous treatment of wounds after operations in our hospitals, and our enormous surgical mortality, still testify to the antiquated and barbarous condition of some leading parts of practice in this school, which is nevertheless remarkable for eminent qualities of intelligence, zeal, eloquence, and learning. These anomalies have often been set down to the blinding qualities of vanity and egotism, which interfere with the development of the French genius. They are more properly attributable to our honest ignorance of what is being done abroad. Our French physicians and surgeons neither travel nor read foreign books; they are afflicted with the *mal de mer*, with linguistic ignorance, and with a dislike to journeys. Some of the fatal consequences of these defects, which have all contributed to the present fallen state of French medical science and practice, will be remedied by the generalization of reviews of foreign work, such as those which are now announced. It is, therefore, possible that they may succeed. The public which can profit by them is certainly large enough. On the other hand, the want of appreciation of light from without, which has led to the present decadence, and the rooted tendency to adore home productions as having necessarily the *cachet Francais*, which has an indescribable charm, may prevent those who may stand in need of such instruction from welcoming the opportunity which will present itself of receiving it. The inferiority of our medical literature to that of other countries has been a source of unconcealed grief to the few really well informed French medical men for many years. Rarely does any book of solid original merit emerge from the press. I could not mention one really original treatise on any one disease, surgical or medical, for

several years. Our leaders are men of eloquence, of fire, of readiness in the tribune; but in the wards they make a lamentable show.

Anatomical Models.

One of the latest novelties introduced in the way of scientific goods are the Bock-Steger's anatomical models, which are imported and sold by Berendsohn Brothers, No. 43 John street. These models are made by Steger Brothers, the well-known sculptors of Germany, under the special supervision of Dr. Bock, professor of anatomy at the University of Leipsic. They are made of a patent composition of plaster, that is hard and durable, but light enough that they may be readily handled and moved from place to place without inconvenience. The natural colors of the parts represented are admirably imitated, so that the models, in all respects, closely resemble the human form. The collection now consists of twenty-six models, and is sold for $150; others, however, will be added. These models have been received by the medical profession with great satisfaction, and their correctness and instructiveness have been readily appreciated. They are already used by all the prominent public and private schools of Germany, England, France, and Italy, and there is no doubt that they will be adopted in this country. The low price at which they are sold renders them accessible to students of limited means, and it is not unlikely they will have a large sale. Many of them are arranged so that they can be hung up like a picture, and certainly a more elegant ornament for a library or studio could not be found.

Pure Milk.

Much of the mortality of infants is owing to the impurity of milk. Mr. Gail Borden has ascertained that a quart of milk, measured and weighed on delicate scales, is equal to two pounds two ounces and one-quarter of an ounce (2 lbs. 2¼ ounces). The tests were made with different samples of milk at different times, but without materially altering the weight. Mr. Borden has adopted the above as a true weight of a quart of milk having a fair average quality. Hence, any person who buys milk may determine by weight, with satisfactory accuracy, whether he receives a quart when he is required to pay for that quantity.

Condensed milk may be often used with advantage in preference to that from milkmen in cities. About this, we learn from a French source that the question whether condensed milk has been prepared from skimmed milk, or from milk which retains all the natural cream, may be answered by ascertaining how much fat is contained in the condensed milk. One hundred cubic centimeters of *unskimmed* milk contains from 3 to 4 grammes of fat; one hundred cubic centimeters of *skimmed* milk contains only about 1 gramme of fat. If milk be condensed four times, that is to say, if into one volume of the solid or semi-solid condensed milk in the tins, there have been concentrated the nutritive ingredients of four volumes of milk, there must be four times as much fat in the one volume of condensed milk as there was in the original milk from which it was made. If the original milk had been unskimmed milk, there should be in one hundred cubic centimeters of condensed milk from 12 to 16 grammes of fat; if, on the other hand, the original milk had been skimmed, there should be 4 grammes in the one hundred cubic centimeters of condensed milk.

The Hospital at Jerusalem.

A correspondent of the *Churchman* writes:—Dr. Chaplin has had the care of the Hospital for nearly twelve years, succeeding Dr. MacGowan, by whom it was founded. We went over the commodious building, solidly constructed, with stone floors, which are more easily kept free from impurities and infections than those of wood; probably in consequence of this advantage, and the scrupulous cleanliness, the average of losses of patients even in this unhealthy city, is less than in most English hospitals. An even temperature is secured by the great thickness of the walls, and in some of the wards there are open fire-places, which can be used in severe weather. There are twenty-five beds, but at times the pressure is so great that thirty-five are made up. The inmates are almost wholly Jews and Jewesses, although in case of need a Gentile sufferer is admitted. Jews often come from distant places for the benefit of operations. We saw a darkened room occupied by a Jew from Egypt, on whom the operation for cataract had lately been successfully performed. The food of the patients is prepared by servants, according to the ceremonial law. Besides the hospital, the dispensary work is very great. Three times a week advice

and medicines are given without charge. Dr. Chaplin and his assistants visit those patients at their houses who are unable to leave them. An idea of the extent of the work may be got from the numbers given in last years report, viz.: Out-patients seen at the dispensary, 7477, the majority being women, while in two years near 10,000 visits were paid to patients at their homes, and this was accomplished by one physician and his medical assistant; two officers serving in the dispensary.

The richer Jews now pay for their medicines, and in some cases for treatment; but the work is almost wholly supported by the English Society.

Value of Charcoal as a Purifier.

Charcoal has the power of absorbing noxious gases, and thus disinfecting the air.

Dr. Vohl, of Cologne, has recently investigated this important property of charcoal, in which he arrived at the conclusion that the carbonic acid gas obtained by heating charcoal is not derived from the coal itself, but that it has been absorbed from the atmosphere, and is held with such tenacity that it cannot be driven out by boiling water; but that a temperature much below that of ignition is sufficient to expel it; and to prove the correctness of his conclusions, he finds that when charcoal has been freed from its carbonic acid and saturated with pure oxygen, no trace of carbonic acid is appreciable, even though it be heated to a temperature of 680 degrees Fahrenheit.

In England, charcoal filters and basins are used to correct impure air. A writer in a British contemporary urges, however, that the air should pass through the charcoal, not merely over it. He remarks:—

Though it is true that if air containing but a small proportion of offensive gas or vapor is made to pass very slowly over a large surface of freshly burned charcoal, a large part, possibly all, of the offensive matter it contains may be absorbed, but there is not nearly the same security that it will be so, as if the air were properly filtered by being compelled to pass through a layer of charcoal; moreover, if it be true, as many believe, that it is not offensive gas or vapor itself, but living organized beings floating in foul air that we have most to fear, it is evident that merely absorbing that which makes air offensive may not be sufficient to render it safe, while passing it through a porous substance will prevent anything passing that is not smaller than its interstices.

I had occasion lately, when preparing a report to the Secretary of State on a proposed novel application of the air-filter to coffins, to put that invention to a very severe test, and found that air, mixed with the products of putrefying offal, drawn by an aspirator through charcoal, though containing abundance of carbonic acid, contained scarcely a trace of oxidizable matter, less indeed than the air of an ordinary room.

Fragrant Bisulphide of Carbon.

As bisulphide of carbon has many important medicinal powers, it is a matter of interest to know that the usually offensive liquid can be obtained free from unpleasant smell, and this as an article of commerce.

Correspondence.

Ovarian Cyst in a Child less than Three Years of Age.

Eds. Med. and Surg. Reporter:—

Dr. C. G. Goodrich's case of Ovarian tumor in a child of eight years of age, published in the October 19th number of the "Reporter," reminds me that I attended the *post mortem* examination of Hattie R——, born the 31st day of March, 1869, and died on the 22d day of March, 1872, whose left ovary was enlarged to the size of a half-gallon jug, and estimated to weigh nine pounds.

The descending colon passed the full length of the tumor in front, and was slightly adherent to it; there were but few other adhesions of any account, and it could have been removed at one stage of its growth, with every prospect of success. An operation was proposed and consented to, when the parents were prevailed upon to take the child to a noted spiritualist doctor in Boston, who assured them that it would pass away by a "tremendous diarrhœa." But unfortunately the child died before the advent of the diarrhœa.

Apropos of diarrhœa. I am cognizant of two cases of unmistakable ovarian cyst cured by a most heroic and persistent use of a common purgative pill. One lady took sixty boxes and the other seventy-two; a constant purgation was kept up, which very few would have the fortitude to endure, and which reduced them almost to death's door.

They were cured on the principle that "increased evacuation produces absorption," as I have seen a large goitre disappear and never return during a severe and protracted dysentery.

A. F. Carr, M. D.

Goffstown, N. H., November 11th, 1872.

The New and Marvelous in Medicine.

EDS. MED. AND SURG. REPORTER:

This has been truly an age of progress in medicine, both as a science and an art. Each new year, in fact almost every day, brings us an account of some new operation, some novel plan of treatment, or some recent discovery.

Perhaps in no branch of our divine art has this advancement been more apparent than in that of Gynæcology. Now the most terrible operations are performed with facility, new modes of medication resorted to successfully, the bare mention of which, only a few years since, would have met with the condemnation of our medical predecessors, and would have forced them to have regarded the speakers as a class of visionary dreamers or reckless adventurers.

Clearly, our duty seems to be to respect both the old and the new; yet in your issue of Oct. 12th there is a report of a gynæcological discovery more wonderful still than any made heretofore, and I freely confess that it requires a most tense effort of my imagination to grasp it. Dr. J. R. Beck details phenomena which explains "fully, satisfactorily, and beyond the shadow of a doubt," exactly how the spermatozoa enters the uterus. After describing the patient's general condition, etc., etc., he says: "Carefully separating the vulvæ with my left hand, so that the os uteri was brought clearly into view in a strong light, I swept the right forefinger across the cervix twice or three times, when almost immediately the orgasm occurred, and the following is what was presented to my view:—The os and cervix uteri had been firm, hard, and generally in a normal condition, with the os closed so as not to admit the uterine probe without difficulty; but immediately the os opened to the extent of fully an inch, made five or six successive gasps, drawing the external os into the cervix each time powerfully, and at the same time becoming quite soft to the touch."

All these phenomena occurred within the space of twelve seconds' time certainly, and in an instant all was as before.

Do not ask me if I believe it; of course I do; how can we doubt what the doctor saw with his own eyes; but in truth, while reading of those terrific spasmodic gasps and gyrations of the os and cervix, we were very much afraid he was going to have his finger bitten, which would have been most unfortunate.

To those gentlemen of the profession who cry down the speculum, and rely with so much confidence upon digital explorations, we have this to say: after this, gentlemen, be careful of your fingers.

"They that fear the adder's sting, will not
Come near his hissing."

But seriously there are a few points about this case which I cannot comprehend. How did he separate the vulvæ, and how did he sweep his finger across the cervix? We can very readily see how the finger could be swept over the lips and external os, but do not see how that could produce the sexual orgasm, unless the uterus was composed of erectile tissue, and we verily believe the provoker of passion in this case to have been the left hand, which rested upon the clitoris and nymphæ.

Thomas says, "endometritis, whether it be cervical, or corporeal, fills the uterine canal with a thick, tenacious mucus, which often prevents the entrance of seminal fluid." This we have often seen and know to be a fact, yet it does seem strange that the small amount of mucus which fills a canal which will scarcely admit the uterine sound, or a crow's quill, should ever be an impediment to the passage of zoöspermes when that small canal will, under the sexual orgasm, open immediately to the extent of an inch. If this hypothesis be true, then those women who never experience an orgasm are necessarily sterile, and why need we ever resort to amputation of the cervix in cases of conoid cervix? Why resort to dilatation with tents or bougies, when the canal of the cervix or os internum is so small as to present a mechanical hindrance to the passage of seminal fluid, if these parts dilate so readily under sexual excitement? These and many other facts we cannot reconcile with the phenomena of this remarkable case.

The woman in this strange case is represented to have been "of strongly marked nervous temperament," and one who, by her own confessions, had a very unnatural, and perverted aphrodisiac power, was very excitable, in short hysterical; just such a woman as would stick her person full of pins or needles, put gravel or other foreign substances into her vagina and urethra, or be guilty of any of the loathsome freaks of that Protean malady, hysteria.

R. L. PAYNE, M. D.

Lexington, N. C., November 12th, 1872.

NEWS AND MISCELLANY.

Resignation of Dr. J. S. Butler.

John S. Butler, M.D., for the past thirty years the well known and efficient Superintendent of the Retreat for the Insane at Hartford, has signified his intention of resigning his position. It is understood that Dr. B. will continue to reside in Hartford, and will aid the Retreat with his advice and counsel.

An Unlearned Druggist.

A writer in the *Druggists' Circular* says:—The proprietor of a pretended "prescription store," of our village, yesterday came in with a prescription for a six-ounce mixture, and in it hydrate chloral ʒiij. He brought in a bottle of "Hydrarg. Chloridum Corrosivum," and, handing me the recipe, asked if that was what the "M.D." meant. Rather than have a *murder* committed by the patient's taking the prescribed drug, I informed the learned "Pharmacist" of the required article.

The Mutter Lectureship.

Dr. J. Solis Cohen will deliver a Course of Ten Lectures under the Mütter Bequest, in the Lecture-Room of the College of Physicians of Philadelphia, on "The Surgery of the Nares, Larynx, and Trachea." These Lectures will be delivered at eight o'clock, on Tuesday and Thursday evening of each week, beginning Tuesday, Nov. 19, 1872.

Gentlemen who are not Fellows of the College may procure tickets (price $5.00) on application to the Janitor at the College building, corner Thirteenth and Locust streets, or from the lecturer (before 11 A.M.) at his residence, 1327 Green street.

Appointment of Dr. Gallatin.

Dr. A. H. Gallatin, of New York, has been appointed Director of the Laboratory, which is now an important feature in the system of free scientific instruction at the Cooper Union. Prof. Chas. S. Stone retains the position he has held for many years as lecturer in General Chemistry. Dr. Gallatin was recently tendered the Chair of Chemistry in a prominent military institute in Penn., but declined. We trust in his new position he may not only do a good work among the young men of the Cooper Union, but that he may have increased facilities for prosecuting original investigations in Chemistry, in which specialty he has already some distinction among scientific men.

Death of Dr. Welwitsch.

A correspondent of the *Scotsman* writes:—"A remarkable man, Dr. Frederick Welwitsch, well known in scientific, and especially botanical circles, died on Oct. 20, in a little lodging on Fitzroy street, near Tottenham-court road. The deceased devoted his whole life to the floral of Africa. He was on the West Coast of Africa for eighteen years, in the service of the Portuguese, and was present at the taking of Congo by them. He had collected, I am assured, 40,000 specimens of African plants, and was, at the time of his death, engaged in a *magnum opus* upon them. His lodging, which was almost entirely filled with his specimens and books, so as hardly to admit of locomotion, was a perfect sight. His best known work is on certain African molluscs."

The Largest Consulting Practice in the World.

Sir William Gull, of Guy's Hospital, London, is said to have the largest consulting practice of any physician in the world, worth not less than £25,000 a year ($125,000). He received one fee, lately, of $4000 for a visit to Dublin.

How to take a Pill.

The *Chicago Medical Times* gives the following directions for taking pills: Put them under the tongue and behind the teeth, and immediately take a large swallow of water, and you will neither feel the pill nor taste it.

On Cathartin.

M. Bourgoin finds that cathartin, extracted from senna, is not a definite substance, but is a mixture of Chrysophannic acid, of dextrose, and of a new principle, chrysophanine.

A DRUGGIST recently received the following prescription, with a request to put it up:—"Fur Kramps.—Tinct kamfire, won ounce; tinct lodenum, a little; tinct kyan pepper, two pen'orth: klouform, a little, but not much, as it is dangerous medicine. Dose, half teaspoonful when the kramps come on."

Dr. IRA REMSEN, lately instructor in the University Laboratory of Tubingen, has accepted the Chair of Chemistry and Physics in Williams College, Massachusetts.

MARRIAGES.

HALL—JENKS.—At the residence of the bride's father, Brookville, Pa., Thursday, September 12, 1872, by Rev. J. J. Marks, D. D., Dr. J. E. Hall, of Parker's Landing, Pa., to Miss Fannie, daughter of Hon. W. P. Jenk.

BAILEY—BATTELLE.—Oct. 10, at Trinity Church, Hoboken, N. J., by the Rev. R. W. Howes, Matthew A. Bailey, M. D., and Agnes S., daughter of Charles B. Battelle, both of New York.

BARROWS—ODELL.—Oct. 24, at the Brick Church, New York, by Rev. Dr. Murray, Arthur A. Barrows, M. D., and Edith, only daughter of Lyman Odell, all of New York City.

BAXTER—WILSON.—At the residence of Col. Thos. Moore, near Franklin, Tenn., on Oct. 23, Dr. M. Baxter, of Franklin, Tenn., and Miss V. Tate Wilson, daughter of Col. Thomas E. and Mrs. M. A. Wilson, of Fort Smith, Ark.

BIGELOW—CROFT.—Nov. 4, at the residence of the bride's parents, at Garrisons, on the Hudson, by Rev. Dr. Macomber, Miss Carrie Croft and G. W. Bigelow, M. D., of New York.

CHAMBERS—HURLBUT.—Nov. 6, at the residence of the bride's parents, by Rev. F. C. Ewer, D. D., M. S. Chambers, M. D., and Lottie B., daughter of Francis E. Hurlburt, Esq., all of New York City.

COOPER—MEARS.—Oct. 23, by Friends' ceremony, Howard M. Cooper, of Camden, N. J., and Alice M., daughter of Dr. Benjamin R. Mears, of Philadelphia.

GLEIM—LOESER.—In Pottsville, Pa., Oct. 23, by the Rev. Dr. G. W. Smiley, George Gleim, Jr., M. D., of Lebanon, Pa., and Miss M. Adele Loeser, of the former place.

STRONG—RENWICK.—Oct. 31, at the residence of the bride's parents, in New York City, by Rev. John Cotton Smith, D. D., Henry T. Strong, M. D., and Mary Crosby, daughter of William R. Renwick.

THOMPSON—ASHTON.—Oct. 31, 1872, at Calvary Church, Germantown, Phila., by Rev. James DeW. Perry, rector, Newcomb B. Thompson and Kate, daughter of Samuel K. Ashton, M. D.

DEATHS.

FISKE.—In Brooklyn, E. D., Nov. 7, Willie Raymond, eldest son of Dr. W. M. L. and Julia P. Fiske, aged 6 years and 3 months.

KING.—Oct. 22, at his residence, near Meridian, Miss., Dr. Peyton King, an old and respected citizen.

RUMSEY.—On the 1st inst., at Fishkill, on Hudson, in the 73d year of his age, James S. Rumsey, M. D.

TREGO.—In this city, on the 6th inst., M. Annie, wife of Dr. Edwin H. Trego, and daughter of the late Bethuel A. Moore.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

TEACHING THE DEAF AND DUMB TO SPEAK.

By Laurence Turnbull, M. D.

Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

In the author's work on Diseases of the Ear,* he has given a full account of the history, progress, method, and present condition of this subject up to the date of publication, in which are set forth the advantages of the systems of symbols and manual alphabet of the "Abbé de l'Epée," of France, and of articulation and imitation of "Heinicke," of Germany. And yet our congenitally mute fellow-beings, who possess sight and the power to make sounds, want something more than is yet taught them, except in a very few institutions, so as to be able to mix with the world either for pleasure or profit. This is to be accomplished by a new, visible, and gymnastic treatment. It will be said that this has been already accomplished, and we have given some most interesting examples in our work, but it has been done only at an immense cost of time and money; and notwithstanding the outlay, only here and there can we find one who can talk without its being painful in the extreme to hear. The congenital mutes, by the old method, cannot vary the pitch of the voice; and even the semi-mutes have no power to produce modulation. For example, we have known instances where the attempt to speak alarmed the listeners, and a desire was at once expressed in writing that the effort should not be made again. It has been so also with persons shopping, that they would have to select certain individuals to wait upon them, no others being able to understand them, although the deaf mute was very proud of the amount of speaking power he possessed.

We would not disparage signs, far be it from us, for it was one of heaven's best gifts to the "Deaf and Dumb," when God put into the heart of the good "Abbé" to devise his alphabet. It has been of incalculable benefit to all nations of the world, for with these signs communication can be made even with the Indian, Chinese, and Japanese. Still, with this knowledge, the deaf and dumb are isolated from the world and society in general. When out of the institution in which they were taught, they are unable to hold converse except with a comparatively limited number of persons.

What the deaf mute wants is to speak, and can he learn to do this? He can, with a considerable amount of mental labor, and cost in both time and money. We feel that it can be accomplished, as deaf mutes possess the main factor of voice, a perfect *larynx*, for this is the essential organ for the production of human speech. 1. There must exist vocal chords forming a part of this larynx. 2. The power of causing parallelism of the edges of these chords; without which they will not vibrate in such a manner as to give a vocal sound. In a few of

* A Clinical Manual of Diseases of the Ear. J. B. Lippincott & Co., Philadelphia. Oct., 1871. pp. 393-437.

the deaf and dumb this is defective in its organic formation at or before birth, so that parallelism cannot be accomplished; and, therefore, no sound is produced. In the laryngoscopic examination of deaf mute children from eight to fourteen years, motion of the muscles which open and close the glottis existed in over ninety per cent., and a certain amount of power of vibration of the cords. 3. There must be a certain degree of tension of the vocal chords, without which they will not vibrate rapidly enough to produce certain sounds. This condition of relaxation is sometimes produced by catarrhal disease, or by overstraining the parts, not only in the deaf and dumb, but in individuals possessing normal hearing. They can also have a defective voice from paralysis, tumors, ulcers, etc., of their chords, conditions which can be overcome by removal with instruments and other appropriate treatment. 4. There must also be a sufficient current of air between these paralleled edges of the vocal chords to cause them to vibrate. This is only to be accomplished by the use of gymnastic exercise, so that the muscular structures of the larynx or the muscles be so disposed as to pull the chords together or away from one another. One set of these muscles is termed thyroid, which tend to pull the thyroid cartilage up when it has been depressed by the crico-thyroid muscles: another set is the posterior arytenoid, which contracts and brings the hinder parts of the vocal chords together and make their edges parallel. The expiratory or chest muscles are now employed to force air from the chest through the larynx, and a musical note, the vowel, is produced. Now this musical note will be low and harsh if the vocal chords are relaxed or diseased, or do not act smoothly from want of use; or shrill and high if the vocal chords are too tense. This difference in want of tune you may have noticed in the sounds that proceed from a violin or guitar string, if one part is relaxed and another too much tightened. The range of any voice depends upon the difference of tension which can be given to the vocal chords in these two positions. The quality of a voice, treble, base, tenor, etc., on the other hand, depends upon the formation of the particular larynx, the primitive length of its vocal chords, and their elasticity, etc.

To be Continued.

AN EXTRAORDINARY CASE OF HYPODERMIC MEDICATION.

By J. B. Mattison, M. D.,

Of Chester, N. J.

We present to the profession the history of a most remarkable instance of the subcutaneous administration of morphine.

C. D., æt. 35, Hungarian, while in Australia, in 1859, began to suffer from trifacial neuralgia, which continued, with more or less severity, for two years; the disease then attacked his left hip, and, until 1864, he experienced, at variable intervals, much distress from sciatica. His suffering had then so greatly increased as to demand active professional interference, and from that date till 1867 he seems to have undergone treatment from almost everything within the range of neuralgic therapeutics: morphia, quinia, atropia, ferri. sulphas, potass. iod., potass. brom., ammon. brom., cod liver oil, and strychnia, hypodermically. Was leeched, blistered, mercurialized, and underwent the actual cautery. After being salivated, he asserts the pain was much diminished for three months, then returning in full intensity, and of the other remedial agents, potass. brom. gave most relief.

In July, of the last-mentioned date, he entered a hospital at Sydney, and the surgeon in charge began the use of morphia by hypodermic injection, gtt. v. sol. magend., bis. die. This was continued for three months, gradually increasing the quantity, at the expiration of which he left the hospital and went two hundred miles in the interior. Thrown upon his own resources, unable to purchase a syringe, and being an inventive genius (jeweler by trade) he manufactured one of silver, and commenced the employment of it himself, in doses of gtt. xxx sol. magend., morning and night. He remained in Australia nearly three years longer, during which time he employed it twice daily, save when unable to get it, in quantity varying from two to ten grains, and never less than the first mentioned amount, in the twenty-four hours.

In December, 1870, he arrived in America, since when he has used the injections three times daily, making in all more than *four thousand*, and consuming nearly *one pound* of morphine.

Near the close of the last session, at the College of Physicians and Surgeons, New

York, he was presented by Prof. PARKER to the class, as a striking illustration of the baneful effects of morphia long-continued hypodermically. We have been informed by a former pupil, a recent graduate of that institution, that Prof. Parker condemns the use of morphia subcutaneously, claiming far greater danger of establishing the opium habit than if it be given by the mouth. He contends that the bitter, disagreeable taste, and the unpleasant gastric results of its administration, per via nat., often constitute an insurmountable obstacle to its protracted use, while the trifling pain of the puncture, and the indescribably enjoyable after-effects, furnish an almost irresistible temptation to continue it.

With all deference to this eminent authority, it does seem to us that this is a very mistaken view of the subject. The amount of suffering relieved by the hypodermic employment of morphia is *incalculable*, nor can it be asserted that the same measure of relief would have resulted had it been administered by the mouth, for every physician knows there are individuals who cannot tolerate opium in any form, as ordinarily given, and to whom, when a necessity for its use arises, the subcutaneous injection of morphine affords a boon obtainable in no other way. As to the danger of creating an uncontrollable desire for its use. We have employed it for years, and in not a single instance has a wish been expressed or implied to continue it after therapeutical indications for its administration had been fulfilled.

This case has been under our observation for three months, during which he has used five grs. morph. sul. regularly every day. Most of the injections have been made in the arms, which present a very striking appearance, being a mass of scars and blotches, from the shoulders to the wrists. His left lower extremity, however, has not escaped, and, exceptionally, he has inserted it in other localities. Several abscesses at the point of injection have resulted, and on two occasions he experienced symptoms so like those of Nussbaum, as to lead me to believe a vein was entered.

Notwithstanding he assures us his pain is very severe when without it, we strongly incline to the opinion that his excessive consumption of morphia is not due *solely* to the urgency of the neurotic trouble, but that the man has, in part, fallen a victim to the seductive influence of opium; and, although it may seem highly presumptuous, from the circumstances of his case, to attempt anything in the way of radical relief from his double trouble, yet, as he is desirous it should be done, we propose to give him the benefit of a certain plan of treatment, hoping, though we confess not very strongly, to diminish the intensity of his suffering, and release him, in a measure, from the bondage of the drug which now enslaves him.

In reviewing the various remedies employed from time to time in this case, it will be noted that a very important one is omitted, namely, arsenic. The patient feels certain it has not been used, and, as he is a man of intelligence, and seems to have kept himself well informed as to his treatment, we have no reason to doubt his statement. We purpose giving him the benefit of this medicine, which, in our hands, has produced results entitling it to much confidence, and shall place him upon the use of Fowler's Solution, gtt. v, *ter die*, gradually increasing the quantity, and with it the administration of Moller's cod liver oil, continuing them steadily, if well borne, for months.

Should this treatment have the desired effect, in toning up the nervous system and decreasing the amount of sciatic suffering, *one* strong cause for the morphia will be set aside, and a great barrier to overcoming the habit, if such it be, thereby removed.

Potass. bromid. from its tendency to diminish the craving for opium, will be employed, and should the above therapeutical measures fail of accomplishing the object aimed at, we shall have recourse to the constant galvanic current, and, after a fair trial, the result, be what it may, shall be announced to the profession.

MEDICAL THERMOMETRY.

BY DR. SYMINGTON BROWN,

Stoneham, Mass.

In examining disease, our predecessors depended more upon rational symptoms than physical signs; in fact, their acquaintance with the latter was necessarily very slight. In our day we attach more and more importance to physical methods of examination; so much so, that we are in danger of underrating the importance of mere symptoms. The elder physicians being closely confined to the use of rational symptoms, made the most of them, and erred

surprisingly seldom. For proof, let our newly-fledged doctors read "Thomas' Practice of Physic," published about sixty years ago. We, who are richer in diagnostic methods, make nearly as many mistakes as our forefathers, with less ground for excuse.

This remark *en passant*. I wish to impress on my fellow-practitioners the advantages of a physical instrument, not as generally used as it should be, the clinical thermometer.

During the last five years I have used the medical thermometer nearly every day; and have been well repaid for my pains. It is not like the sphygmograph, the dynamometer, the endoscope, the laryngoscope, or the ophthalmoscope, delicate and expensive instruments, which each require a special training and considerable practice before they can be of any service: the thermometer is cheap, portable, easily applied; only needing moderately clear eyesight and good judgment to be of inestimable service.

A recent writer in one of the medical journals has taken off, in a vein of mild sarcasm, the demands of modern science on country practitioners, saying that he must buy a two-horse wagon to enable him to carry the galvanic batteries, steam inhalers, syringes, supporters, pessaries, new-fangled splints, etc., needed to meet various exigencies. There is some truth in this; for even if it should not be considered necessary to carry the legion round with us, it would take a small fortune to buy them. But this objection does not apply to the clinical thermometer, which is as cheap and portable as it is useful.

From the earliest historic ages, attention has been paid to heat as a sign of disease. Hippocrates himself set a high value on temperature as a means of diagnosis in acute diseases; and in later times, Boerhaave, Van Swieten, De Haen, of Vienna, Wunderlich, in Germany, Sidney Ringer, in England, and Seguin, here, have devoted much time and labor to the subject.

The normal temperature taken in the axilla, is 98.5° Fahrenheit. In health this seldom varies more than a single degree. During infancy and childhood the temperature is a trifle higher than in adults, and the amount of oscillation during a day and night is considerably greater, sometimes extending to 3°. In old age, again, the temperature slightly rises, and is subject to greater oscillations, as in infancy. The free use of alcoholic drinks lowers the temperature; so do ether and chloroform. Strong tea causes a slight rise.

The range of temperature in disease varies between 95° and 108°, very rarely falling below or rising above these figures. In the greater number of diseases the temperature rises; in only a very few does it fall; as in Asiatic cholera. The *surface* heat in this disease has been observed as low as 79°. The highest temperature yet noted is 112°, which occurred in a case of tetanus. High degrees have also been observed in scarlet fever. Sometimes one part of the body is hot while the rest is normal or colder than natural; this is an unfavorable sign. Extreme or sudden oscillations also indicate evil. In all cases, however, the rational symptoms ought to be taken into account, and so save us from jumping at rash conclusions founded on isolated observations of temperature.

A busy country doctor cannot take hourly observations; the niceties involved in tenths of a degree are seldom within his grasp; but he can tell, even by a single observation, that a feverish attack is *not* typhoid fever, if the patient has been an hour in bed, the instrument ten minutes in the axilla, and the mercury only rises to 99.5° or less. It is advisable as a precautionary measure, to wipe the armpit dry before insertion, folding the arm over the chest; and no observation should be taken immediately after vomiting or purging, nor during profuse perspiration.

The thermometer is often useful in doubtful cases, foretelling a storm of disease, as the barometer warns the mariner. Where auscultation, percussion, and rational symptoms fail to detect tuberculosis, a persistent rise of temperature may give timely warning. It is also useful in feigned diseases. Rapid pulse, spitting blood, redness of surface, etc., may be simulated by ingenious malingerers; but the axillary temperature cannot be easily tampered with.

Thermometry is not hurtful or disagreeable to the patient, a plea which cannot always be urged for some other modes of examination. "Do you feel pain here, madam?" asked an enthusiastic percussor. "Only where you thumped me," was the significant answer. Experimental explorations, to satisfy students or visitors, is the dread of sensitive hospital patients.

There are two prevalent diseases, typhoid fever and phthisis, in which the busiest practitioner may derive aid from the clinical thermometer. In typhoid fever, thermometric observations have been more numerous than in any other disease, and the results are more complete. During the first four days of the fever a steady rise of heat takes place, being about 2° higher in the evening than the morning. When perforation occurs, with profuse hemorrhage, the temperature suddenly falls below 98°, which is in itself a bad sign. In a case of typhoid fever treated during December, 1871, I noticed a rise of temperature at the morning visit, which, with other unfavorable symptoms, was traced to impaction of fæces; the muscular strength was so much reduced that it became necessary to relieve the loaded gut with the forefinger, used as a scoop, a disagreeable operation, which required to be repeated on two or three days subsequently, before the muscular coat regained its tone. The patient recovered.

In what is sometimes called "galloping consumption," I have more than once detected tuberculosis before the physical signs derived from auscultation were at all clear. The same remark applies to scarlet fever before the appearance of the eruption.

The thermometer I employ is bent at an obtuse angle, and costs only $2.50. It only marks half degrees. Occasionally an instrument graduated to fifths of a degree may be found serviceable; but the cheaper one will answer the wants of most busy general practitioners.

TRAUMATIC RUPTURE OF THE INTESTINES.

By J. F. Hartigan, M. D.,
Of Washington, D. C.

Frank Reddin, colored, æt. 11, was kicked by a horse at Cape May, about the 1st of September last, and died twenty-four hours afterwards. Deceased, it is represented, was in the act of assisting a child of the owner on the animal's back, when probably the animal being teased by the flies, drew his left hind knee suddenly forward, striking the boy in the abdomen, below the umbilicus, and throwing him down. Immediately he ran a distance to the house, looked at the injured part, and came back to his mother crying. After going to bed the symptoms grew worse, and a physician was summoned. Dr. J. S. Kennedy arriving about half an hour afterwards, found the patient vomiting blood and complaining of nausea, great tenderness over the umbilical region, but no particular pain; pulse was somewhat accelerated, with increased heat of body. There was no contusion of any kind perceptible, and after prescribing an anodyne, the doctor left; at his second visit, in the evening, the stomach was apparently more quiescent; tenderness, however, continued, with pain now over the region of the liver, great restlessness, increase of fever, and occasional retching. Next morning he found the patient almost moribund, pulseless, a cold, clammy sweat covered his body; he complained of no pain, although quite conscious, and from this condition he never rallied.

The foregoing is a history of the case as far as can be learned. The employer of deceased had the body conveyed to his home in Washington for a *post-mortem* examination. Careful inspection did not reveal the slightest contusion or ecchymosis externally, nor extravasation of the abdominal muscles. About half a pint of clear serum was contained in cavity of the abdomen; the peritoneum was agglutinated in various parts, and bands of lymph covered the intestines. About the middle of jejunum there was found a small rupture of about half an inch, irregular in shape, surrounded with coagula. Other organs healthy.

Two nearly similar cases to the above, but differing somewhat in the symptoms, are reported by Dr. Edwin Bently, U. S. A., in the *Pacific Medical Journal*, for August last. One, a boy about six years old, while running past, became engaged between a fence and the projecting end of a backing wagon. He was taken up apparently fainting; stimulants were administered and he appeared to rally. A physician was sent for, but the slightest bruise or abrasion could not be detected. Proper diet being directed and stimulants continued, the night was attended by a fair amount of repose, and on the following day—aside from the extreme paleness and anxious countenance—little concern was apprehended. The second night was more restless, constant nausea and frequent retching occurring. Next morning the urine was abundant, but no fecal discharge had taken place since the accident; cathartics were administered and returned like everything the stomach received; he

was able to bear his weight on his limbs, and even to walk; there was no evidence of inflammation, and enemas, like the purgatives, were repeated to no purpose. The boy died the third night.

Necropsy showed a chlorotic whiteness enveloping the whole surface. No contusion could be detected on the most careful search; pupils were dilated, and liquids ran from the nose and mouth; peritoneum contained a few ounces of fluid. The serous coat of small intestines was agglutinated together in patches; the ilium was found ruptured in three places, one place about ten inches from the ileo-cæcal valve being completely separated.

The other case is as follows:—

A man about forty years of age was found by a policeman in company with a man apparently intoxicated. Both being taken in charge, the latter soon recovered, while the former continued more and more depressed. The symptoms, which at first simulated those of his comrade, were changed for increased prostration and debility. He was only able to communicate, in incoherent terms, that he was "hurted in his belly," which, under the circumstances, did not attract special attention, and the external examination failed to expose any marks or wounds whatever. It was supposed that rest and time would clear up an intellect clouded with over-stimulation; but he never rallied, and within forty-eight hours death supervened. Nothing definite in the history had been elicited, and it was fair to presume that the result was only the culmination of an unfortunate career. A *post-mortem* examination was, however, made fourteen hours afterwards; pupils were dilated, the scalp appeared constricted and tightened down over the skull. The membranes of the brain being exposed, the distended meningeal arteries were seen ramifying over the surface; two ounces and a half of serum escaped from serous surfaces at the base of the brain. On reaching the abdomen the roughened, reddened surfaces of the intestines, and their agglutination in patches, at once attracted attention, while a semi-fluid mass of half-a-pint or more was found within the cavity of the peritoneum. A more careful examination showed an opening about the middle of the jejunum, extending across three-fifths of its calibre, with the edges everted. There were two other small lacerations in the course of the small intestines. Through these orifices chyle had passed out, and through them also had migrated two large lumbricoid worms.

There would seem to be no question as to the cause of the openings in these cases; all three subjects were perfectly healthy; therefore it is a safe inference that the result was due to violence, although there was nothing externally to show it. The first case recorded is further remarkable from the fact that there was no counter-resistance, the boy being in a stooping position, and thrown down by the force of the horse's knee.

Medical Societies.

MEETING OF THE MEDICO-LEGAL SOCIETY OF NEW YORK—JURIES AND PHYSICIANS ON QUESTIONS OF INSANITY.

The Medico-Legal Society of the City of New York held its monthly meeting, Nov. 14th, at the College of Physicians and Surgeons, Twenty-third street, Mr. Clark Bell President. Dr. Stephen Rogers delivered an address, congratulating the Society on its encouraging prospects. The inaugural of the Chairman followed, in which he made special mention of the fact that while most lawyers had been taught medical jurisprudence as a part of their education, the same could not be said of physicians. Was there any reason why a medical expert should not be versed in any legal question which might arise? He was quite sure that the establishment of a chair of medical jurisprudence in one of the medical colleges of this city would be desirable. A library of works on the same subject he believed to be also necessary. Mr. R. S. Guernsey then read the paper of the evening on "Juries and Physicians on Questions of Insanity." After quoting largely from medical and legal authorities on the subject, and speaking of the importance of the duty of medical experts in trials where insanity was pleaded as a defense, the author came to the conclusion that if any change be made in the law governing such trials, it should be to take the question of sanity or insanity from an irresponsible jury and place it in the hands of a responsible judiciary. The reading of the paper elicited some discussion. The meeting then adjourned.

ALLEGHENY COUNTY (PA.) MEDICAL SOCIETY.

The monthly meeting was held in the University Building, on Tuesday evening, October 6. Dr. A. M. Pollock was elected President, *pro tem.* The attendance was smaller than usual on account of excitement arising from the Sol-

diers and Sailors' Convention. Owing to this the Committee on Medical Intelligence, Diseases, and Metorology were not able to report.

The special business of the evening was called for. Dr. McCann gave the history of two cases of traumatic tetanus. The first was that of a complicated fracture of the leg, with great destruction of the tissues, without, however, destroying the supply of blood to the limb. An attempt to save the leg was made, when tetanus took place on the eighth day after the injury. Hydrate of chloral was given at first with apparent beneficial results, but an unpleasant effect upon the brain induced him to stop the chloral and to give bromide and iodide of potash, with hypodermic injections of atropia. The patient died suddenly on the sixth day.

The second case was tetanus, occurring two weeks after amputation at the ankle joint. Hydrate chloral and calabar bean were given at first, but the chloral was left off on account of unpleasant brain symptoms. The disease had yielded, and would probably recover, as two weeks had elapsed since its beginning. Dr. McCann was requested to report the result at the next meeting.

Dr. Maginni gave a case of tetanus that recovered by the use of 90 gr. doses of chloral.

Dr. Metlock had no faith in chloral in such cases, but thought that morphia is preferable.

Dr. Donnally believed that amputation is generally necessary in such cases, and gave cases illustrative.

Dr. Wood said that the surgeon who discarded hydrate of chloral from want of faith in its powers, deprived himself of one of the most active agents in controlling spasmodic diseases of all kinds. Chloral is as safe as morphia, and much more effective in controlling tetanic convulsions. He believed that amputations in tetanus are, as a rule, unnecessary, and often hurtful.

Dr. Pollock said that the question of amputation was difficult to decide. In acute tetanus it was useless; never saw an acute case recover. Saw three cases of the chronic form recover, two in which amputation was resorted to, and in the other dissection of the cicatrix.

A lengthy discussion took place upon the curative properties of hydrate of chloral in delirium tremens, and in asthma, which was participated in by Drs. Maginni, Daly, Pollock, McCann, Metlock, and Wood. In delirium tremens a variance of opinion was entertained. Dr. Maginni believed it to be the remedy *par excellence*. Dr. Metlock had little faith in it. Drs. Daly and Wood believed it to be an excellent remedy in most cases, and that while the large majority of cases will recover under the use of milder drugs, proper nourishment, quiet, etc., yet under the use of chloral the recovery is much more rapid.

An expression was called for the indications for the employment of chloral in mania-a-potu. Dr. Wood believed that wakefulness was the indication, and that the symptoms generally yielded after a few hours of sound sleep. Dr. Daly said that sleep was not the only indication, for a patient may sleep well and yet suffer from delusions and hallucinations. On motion adjourned.

W. H. Daly, M. D.,
Secretary.

Editorial Department.

Periscope.

Wounds of the Female External Genital Organs.

The following cases are given by Dr. Parvin in the *American Practitioner*.

Case I. Eighteen months since Miss ——, while washing windows, standing upon a narrow board crossing an open empty barrel, lost her footing and fell, one of her feet outside the barrel, the other in, and a corner of one of the staves tearing the nympha, and penetrating inward toward the clitoris about half an inch. The hemorrhage was profuse at the time of the accident, and continued intermittently until I saw her, twenty-four hours after. A compress secured by a T-bandage, rest, the bladder catheterized twice daily, constituted the treatment. She was well in a fortnight.

Case II. Mrs. ——, about thirty years of age, the mother of two children, while about sitting down on an earthen "chamber" to evacuate the bladder, unfortunately slipped, tilting the vessel on one side, so that the edge of the rim pressed suddenly and violently against the right labium. Considerable hemorrhage immediately ensued. This hemorrhage was temporarily checked by cold astringent applications and manual pressure: but it returned several times within thirty-six hours, at the expiration of which I saw her. The veins of the right limb were somewhat varicose. It was not easy nor was there time to examine those of the corresponding labium, but the probability is they were in a similar condition. I found a rent upon the inner surface of the labium, superiorly and near its base, the rent partially occupied by a clot quite the thickness of my little finger, and from its unoccupied portion giving exit to a considerable quantity of venous blood. Not removing the clot, I immediately

applied the compress and the T-bandage. The patient was well in ten days.

Remarks. Fatal wounds of the external genital organs have been recorded, but usually these cases have occurred in pregnant women, or just after parturition. Dugardin* narrates a case occurring in May, 1772, of a lady six months pregnant accidentally receiving a wound an inch long in the right labium, who died from hemorrhage within five hours after the accident. In such cases doubtless the veins are varicose.

When we remember the abundant vascular supply of the external organs of generation, and the various bulbous expansions surrounding the vaginal orifice, forming an abundant erectile tissue, from which the blood is returned by valveless veins, we readily understand why the hemorrhage in the wounds we are considering is almost always venous and often so profuse.

As to the treatment, it is usually a fruitless waste of time to hunt, as advised by some of the old authorities, bleeding vessels for ligation or torsion, an unwise thing to empty out clots, a needless thing to rely on astringents or sutures; but a graduated compress and bandage are, in my opinion, the simplest and the most effective means in the vast majority of cases. The bladder should be emptied by the catheter twice in the twenty-four hours; and in any case where the hemorrhage has been severe the patient should not be allowed to sit up within forty-eight hours, even for a few minutes.

The Median Operation of Lithotomy.

Dr. J. H. Pooley says of this operation, in the *New York Medical Journal*:—

Its advantages, as I estimate them, may be arranged under the following heads, viz:—

1. Ease of performance.
2. Freedom from danger.
3. Control of the bladder after the operation.

1. Having performed both this and the lateral operation, I unhesitatingly declare my opinion that the median is the easiest of performance, indeed, I may say *as easy* as any operation can well be.

Having been so forcibly struck with the superior ease of performance of the median operation, I was very naturally surprised at the following statement of Sir Henry Thompson, in his "little volume, but great book," entitled "Clinical Lectures on Diseases of the Urinary Organs," etc., where, on p. 165, he says:—"I cannot tell you which of these two operations is the easier; if anything, perhaps, the lateral." To this judgment, notwithstanding it is Sir Henry Thompson's, I must decidedly object, for my own experience of the two leads most emphatically to a diametrically opposite conclusion, and I recommend the median as very much easier of performance than the lateral operation of lithotomy.

With regard to the *technique* of its performance, however, there is a hint in this same book of Thompson's which I regard as valuable, and to which I wish to direct attention. As ordinarily described, the directions are, after having introduced the grooved staff and feeling the stone, and having made out the outlines of the prostate, to thrust a straight bistoury back, downward, through the soft parts, just in front of the anus, until its point enters the groove of the staff, and then cut upward and outward at one incision.

Another method, and that which I employed in my last operation, is to dissect down to the staff by making an incision an inch or more in length just in front of the anus, before engaging the point of the bistoury in the groove of the staff. Sir Henry says:—"I prefer the other mode," *i.e.*, the one just mentioned, *and so do I.* It is a fact which has come to my knowledge, that far better and more experienced operators than myself, operating by the first method, have failed to lodge the point of the bistoury in the groove at the first thrust, but have carried it, they knew not where; an accident that may with certainty be avoided by this preliminary incision. I have seen the operation performed in the way here recommended once since I did it myself, and then the operator, keeping the back of the knife toward the rectum, made his preliminary incision by cutting upward; this method is more or less awkward, and I can see nothing to recommend it.

2. *Freedom from Danger.*—There can, it seems to me, be no dispute on this point. Both the lateral and the bilateral are confessedly liable to danger from hæmorrhage. I have seen one case of the latter operation where the bleeding was troublesome, and heard of one where it was fatal, and every direction for the older or lateral includes cautions for avoiding this danger, but in the median this source of danger is almost abrogated; if it is *median*, there are no vessels to cut.

There is another immunity which this operation enjoys that deserves mention. There is no division of the prostate, therefore, no danger of dividing it too freely, and thereby incising the perineal fascia and giving rise to deep or pelvic urinary infiltration. I believe this danger has been made too much of, but, still, if it exists at all for the other methods of operation, it certainly does not for the one which I am now advocating. Thus, to say nothing further, we fully justify our second claim, that this operation is freer from danger than the other methods of lithotomy; and—

3. The patient has full control of the bladder after the operation.

Great was my surprise to find that Sir Henry Thompson, in his volume on "Practical Lithotomy and Lithotrity," when comparing the advantages of the various methods of operating, makes no mention of this, in my

**Bibliothèque du Médecin Praticien*, Vol. I., page 9.

opinion, enough of itself, *cæteris paribus*, to decide the question in favor of median lithotomy wherever it is applicable.

Those who have performed the other operations, and have had the case, and witnessed the inconvenience of the "lithotomy sheet," as it is called, would, I should have thought, have required no other argument for the median operation in proper cases. I say in proper cases, for notwithstanding all I have said in its favor, and I think no one appreciates it more highly than I do, I do not believe that the operation of median lithotomy is applicable to every case; indeed, I think this has been a weak point with all lithotomists; they have advocated some favorite operation for every case, to the exclusion of all others, instead of studying and mastering all, and trying to adapt the operation to the case.

Effects of Absinthe.

Magnan has made an extensive and interesting series of experiments with absinthe, quoted in the *Journal of Psychological Medicine*:—

By whatever means this substance was introduced into the economy, whether by the stomach, hypodermically, or by injection into the veins, the following phenomena were observed: If the dose were a small one, feeble, spasmodic twitchings set in, especially in the muscles of the neck, by which the head would be drawn upward and backward; a little later these twitchings would extend to the muscles of the shoulders and back. Sometimes it was observed (chiefly in dogs) that the animal would suddenly become motionless, remain standing, half unconscious, for from thirty seconds to two minutes, with head and tail lowered, and then would resume his ordinary attitude. This dizziness has some similarity to epileptic vertigo.

If the dose of absinthe be increased, the above symptoms develop into violent attacks; the animal falls suddenly to the ground, is seized with trismus, and at times with tonic spasms of one side of the body, to which, after a few seconds, clonic spasms succeed; he froths at the mouth, and sometimes bites the tongue; breathing is rattling, urine and fæces are passed, seminal ejaculations take place. After the attack has passed off, the animal remains for some time in a state of stupor, which, however, soon yields to his ordinary condition. Only occasionally, and at intervals of from ten to twenty minutes, do the epileptic attacks recur. During the lucid intervals the animals are very often the subjects of real hallucinations, which are apparent in the manifestation of fear and horror.

When Magnan administered a mixture of alcohol and absinthe to a dog, the symptoms of inebriation appeared first, and a few hours later the above-described convulsions set in. The order in which the symptoms developed seemed to be due to the more ready absorption of the alcohol by the stomach, for this order was modified by injecting the absinthe into the veins.

The autopsies of animals poisoned by absinthe showed, besides a penetrating odor of wormwood in various organs of the body, great congestion of the cerebro-spinal vessels, and of the meninges of the brain, extreme hyperæmia of the medulla oblongata. The brain and spinal cord presented upon transverse section a uniform rosy coloring, with injection of the vessels; occasionally the stomach, more frequently the endocardium and pericardium, showed small ecchymoses.

In proof of the fact that the effect of absinthe upon animals finds its analogue among the workingmen in France (who habitually drink it), Magnan cites several cases of disease, which prove that alcohol alone is not able to cause epileptic convulsions, and that these appear only in individuals who have been accustomed to the use of absinthe.

At the end of the work Magnan discusses the prognosis and treatment of acute alcoholpoisoning. Of one thousand individuals admitted into Bicêtre (1855–1862), suffering from alcohol-poisoning, two hundred and sixty were acute cases, of which number twenty-one died; *i. e.*, eight per cent. Of eight hundred and ninety-three inebriates (from alcohol) received into St. Anne's (1867–1869), two hundred and thirty-one were acute cases; of these only 1.30 per cent. died.

The treatment in both institutions was the same. Magnan does not think his favorable results were due to the setting aside of all bodily confinement, whereby constrained respiration and unnecessary muscular exertion upon the part of the patient, in order to escape from his bands, are spared. In cases of extraordinary frenzy, Magnan also resorts to a close-fitting but nowhere confining garment (described by him in his book), and places the patient in a well-ventilated cell, whose walls are thickly padded. A further rule of treatment is, to aid in the elimination of the alcohol from the system. This is accomplished by the administration of large quantities of water, and gentle laxatives, citrate of magnesia, bitartrate of potassa, etc. If collapse, or a condition of great weakness set in, strong beef-tea, meat, and tonics, especially quinine, must be given.

The Extraction of Foreign Bodies from the External Ear.

Dr. Jos. Gruber (*All. Wien. Med. Zeit.*, 15th Oct.) says that since empiricism was abandoned in treatment of diseases of the ear, physicians have become convinced that the extraction of foreign bodies from the external ear should almost always be made by injections, and that it is only in the very rarest cases that instruments should be made use of. The external ear is so constructed that in the way in which ordinarily foreign bodies are introduced into it—which, as is well known, takes place

in children during play—the body introduced does not go far in, and is so loose that it can be brought away by an ordinary injection. Where the cartilage joins the bony part of the ear, the diameter of the canal is narrowest, whereby the entrance of larger bodies into the deeper portion is much hindered; besides which the axis of the auditory passage is bent at an acute angle, and the corner of the angle takes place at the narrowest point. In this peculiarity we must seek the cause why large foreign bodies rarely get beyond the cartilaginous portion into the deepest section of the passage, and, therefore, in the majority of cases, can be very easily extracted. Notwithstanding all this, it is by no means rare to find that dangerous results take place from attempts to remove such bodies by all sorts of instruments. Hair-pins, pincettes, and even scissors are often used in the most dangerous way to attempt extraction, which may, any of them, cause dangerous accidents to the patient. Such operations have the further disadvantage that they make extraction by simple injections more difficult; so that an ear doctor is always glad to hear that the patient has not been meddled with until brought to him for inspection.

The washing out of the auditory passage, if it is to be made well and the end be well-considered, is by no means so simple and easy as it appears in general; and persons who are well acquainted with the art will confess that this requires as much practice as catheterism of the Eustachian tube, and that in order to arrive at the goal by injection, he that is best acquainted with the anatomy of the parts is most likely to succeed.

It is best in all cases, unless the foreign body be likely to do injury through its chemical properties, to let it alone until any inflammation caused by instrumental interference be a little calmed, before we commence injection to remove it. A boy at school put a small foreign body into his comrade's ear, and pushed it deeply in by means of his pencil. Pain soon after came on, and a physician, after attempting extraction by means of instruments, fruitlessly, prescribed an anodyne medicine. Five weeks after, the patient visited Dr. Gruber, much brought down in health, and feverish. The parts about the right auditory passage were much swollen, inflamed, and the passage thereby much narrowed and filled with exudation. After removing the latter, there was seen, deep down, a dark brown body, which lay very deep. The washing out of the passage was likely, in this case, to be useless, and we confined ourselves to cause the inflammatory processes to disappear first of all; and then, when the auditory meatus was larger, to use injection. To do this, a wash of morphia and acetate of lead was used, and cold compresses were ordered behind the ear, and the cleansing of the auditory passage by injections with tepid water was used once a day. During the injections a portion of the water from the very first came through the nostrils, which showed that the membrana tympani was at any rate perforated.

After the symptoms of inflammation had disappeared the foreign body was also more clearly seen, but its extraction by washing out of the auditory passage was not yet possible, so that small pieces of compressed sponge were inserted in order to widen the passage; and a solution of sulphate of zinc (five grains to the ounce) was dropped into the ear. In the month of December, that is after a stay of the foreign body for three months, it came away after a simple injection of tepid water. The issue of pus had ceased for some weeks, although the foreign body was still *in situ*, and when that was removed the membrana tympani was seen degenerated like a cicatrix, but not perforated. The perforation had healed up whilst the foreign body was still in the ear.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A topic recently discussed in our pages, and a question which concerns all manufacturing countries, is treated for Italy in the brochure of Dr. S. Bonomi, of Como, "Sul lavoro dei fanciulli negli opificj," in the course of which the author says: "By getting operatives at ten years of age, you will have only wretched soldiers at twenty and thirty, and ruined men, worthless for reproducing the species; compelling a child to labor prematurely will never make an intelligent and robust workman." Two other Italian physicians, Drs. Verga and Valsuani, have been investigating the pretensions made concerning the anti-cancerous properties of the weed cundurango ("Il condurango nelle affezioni cancerose"). They agree with the faculty here in regarding its alleged virtues as decidedly "not proven."

——Dr. Pellarin, of the French navy, has published a *Hygiene des Pays chauds*, in which he discusses the contagiousness of the cholera, demonstrated, he thinks, by the history of the epidemic at Guadaloupe. Hints for emigrants and travelers, and directions for health on shipboard in the tropics are also given.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 23, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

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THE LAW OF INTEMPERANCE.

Dr. BOWDITCH, in the *Report of the State Board of Health* of Massachusetts, proposed a "cosmic law of intemperance." He states it in these terms:—

"Intemperance prevails the world over, but it is very rare at the equator. The tendency increases according to latitude, becoming more frequent and more brutal and disastrous in its effects on man and society as we approach the northern regions."

It will be perceived from this that the foundation of Dr. BOWDITCH'S theory in regard to intemperance is, that it depends upon climate chiefly, for we can safely assume that he means isothermal parallels from the equator.

His position has been impugned in an able thesis by Dr. GEORGE M. BEARD, entitled "The Cosmic Law of Intemperance, a contribution to the scientific study of the temperance question." He concludes his study with the following epitome:—

Whether a nation is to be temperate or intemperate depends on the following conditions, which I name in the order of their relative importance:—

1. Race.
2. Climate.
3. Social position (including religion, education and government, and financial status).
4. Kind of liquor employed.

Given these factors, bold, energetic races, trying and disagreeable climate, gross ignorance and poverty, and adulterated distilled liquors, and we have intemperance. Given, timid and indolent races, mild and equable climates, high intelligence and education, and wealth, and pure native wines, or mild fermented liquors, and we have temperance.

With all the exceptions that may be brought, these laws hold true as generally and as logically as any laws of cause and effect that are known to science.

It is clear that the two most important factors here mentioned, race and climate, are beyond human control. Hence we feel some anxiety about the lesson to be drawn from the position here taken. Dr. BEARD briefly puts it as follows:—

The means for diminishing intemperance which are at all under human control are the following, which I present in the order of their relative importance:—

1. Education, literary, technical, scientific, moral, and religious.
2. Diffusion of material comforts.
3. Popularization of pure wines and mild beers.
4. Restriction of the sale of strong and adulterated liquors.

Of these four methods of attacking the evil of intemperance, through universal education, through diffusion of material comforts, through popularization of pure wines and mild beers, and through restriction of the sale of strong and adulterated liquors, the *first* mentioned is not only more important than all the others, but is really worth more than all the others combined; it is the method that demands first and chief consideration, even to the neglect of all the rest. The second method, through the diffusion of material comforts, is closely related to the first, and indeed becomes a part of it; while the third and fourth methods are of but little avail unless preceded and reinforced by the first and second.

These views of Dr. BEARD'S are not new. We remember in a little work of his we reviewed a year ago, we directed attention to

them, and pointed out wherein lies their greatest fallacy; and we add that it is just as apparent in the "law" of Dr. BOWDITCH. This fallacy is that it reduces man too much to a mere creature of circumstances, of race and surroundings, allowing too little play to his free will, his moral power, his ethical autonomy.

Race and climate do not influence men so much in this matter as has been claimed.

Dr. LUMÉR, of France, has collected some sad and startling statistics, showing how rapidly the French peasantry are degenerating in their temperance traits. Liquors distilled from beet root and grain are being substituted all over France for beer and cider. Some of his results are as follows:—

Spirits (alcohols d'industrie), which at first were only consumed in some departments of the north, have, during the last twenty years, gradually passed into use throughout the whole of France.

Taking the whole country into consideration, the consumption of alcohol has almost doubled between the years 1849 and 1869. It has now reached 2 lit. 54 per head.

In the same period, or more exactly from 1857 to 1868, the relative number of cases of insanity from alcoholism has increased 59 per cent. in men, and 52 per cent. in women.

In the departments which produce neither wine nor cider, but produce alcohol, the annual consumption has increased in twenty years from 3 lit. 46 to 5 lit. 88 per head.

In these same departments the proportion of cases of insanity from alcoholism has increased from 9.72 to 22.31 per cent. in men, and from 2.77 to 4.14 in women.

In the departments which do not produce wine, but both cider and alcohol, the consumption of alcohol per head has increased in twenty years from 5 lit. 50 to 8 lit. 50.

In these departments the proportion of cases of insanity due to alcohol, already large in 1856, has doubled among the men, but has not sensibly increased among the women.

In those which produce neither wine nor spirit, but only cider, the consumption of alcohol, which was only 2 lit. 43 in 1847, is now 4 lit. 08.

It is in these departments that the proportion of cases of insanity due to alcoholism reaches the highest figure, particularly among the women.

It was already in 1855 16.44 per cent. among men, and 4.06 per cent. among women, and now it is 28.53 and 9.18 per cent.

In the departments which produce neither wine, cider, nor spirits, the consumption has increased from 1 lit. 42 to 2 lit. 69.

The proportion of cases of insanity due to alcoholism increased from 7.37 to 10.25.

In those which produce both wine and alcohol from wine, the consumption, which was 0 lit. 53 in 1849, is now only 1 lit. per head.

The relative number of cases of insanity due to alcoholism has only increased from 7.63 to 11.40; the mental diseases following excesses in drink are there relatively rare among women.

In those which produce wine and spirits (d'industrie), the consumption of alcohol, already large in 1849, has almost doubled in twenty years.

Here we see a nation naturally temperate, for what reason we need not discuss, rapidly becoming intemperate, simply because distilled spirits from coarser vegetables have been offered in abundance and at cheap rates, in place of the juice of the grape and the apple.

The reason why those alcoholic beverages produced by simple fermentation have less tendency to induce alcoholism and insanity than those formed by distillation, is not hard to find. The processes which produce the latter destroy many chemical relations which the alcohol sustains in fermented liquid, which modify its physiological effects and render its action less deleterious on the nerve-centres and the mucous lining of the stomach. Mere dilution does not supply the place of this, as daily experiment proves.

THE NATURE OF THE EPIDEMIC AMONG HORSES.

One of the good results which we hope to see brought about by the epidemic disease which has been prevailing among horses is a closer, and more uniform and scientific attention to the diseases of the lower ani-

mals. At present and hitherto this has been left, as a rule, to ignorant pretenders, and a well educated veterinary surgeon has been rarely met with in our country.

The pathology of the disease has been studied to a limited extent only. Hence we are not quite positive about the nature of the complaint. The editor of the *British Medical Journal* treats it as an ordinary visitation of influenza. He says:—

The very severe epidemic among horses which is reported from America and Canada is of a kind well known here. It is, in fact, an epidemic influenza. This epizootic is a catarrhal affection resembling, in all its symptoms and in its course, the epidemic influenza of poor humanity. It runs a definite course: it is accompanied by severe nasal catarrh, general fever and debility; in severe cases the lungs and pleuræ are apt to be affected. It requires the same kind of nursing in animals as in men. Rest within doors, a light, nourishing diet, mild febrifuge medicine, if any, and attention to the local troubles of the throat and air-passages. A very small proportion of the cases are fatal, but the epidemic is apt to prove very troublesome in European experience, by its widespread and debilitating character.

In this city the deaths have been many. Dr. JOHN WYCHE, who examined a number of bodies, has stated that the disease was a specific poisoning of the blood, and that the symptoms of dropsy were caused by emphysema, or a distention of the body or its members, from air accumulated in natural cavities. There was no sign of water accumulated in the cavities, as in the case of dropsy. The horses dissected were swollen about the legs, body, and head, and all of their internal organs, and even the muscles of the legs, were in a state of putrefaction.

Dr. Wyche stated that he had under his care about eight hundred horses, and, having treated them according to their symptoms, without regard to the disease, he had lost only nine, and that Mr. Malcolm, out of one hundred and fifty horses, had lost only one. In this view of the new phase of the disease, the Sanitary Committee of the Board of Health of New York, in so far as it opposes the popular idea, that the swelling is due to dropsy, in its report says that the new form of sickness resembles scurvy in the human subject. "The blood is so deteriorated that it escapes from the vessels into the cellular tissues under the skin, so as to cause large ecchymosis, giving rise to bloody discharges. The red globules are in a state of disentegration, and the serum escaping from the vessels, collects under the skin in the most dependent portions of the body, causing the appearances known as dropsy."

The destruction of the integrity of the blood seems to be largely due to the effect of the preceding fever, especially in the case of horses which have previously been poorly fed, overworked, and kept in ill-ventilated and filthy stables. Another and powerful exciting cause is excessive medication during the fever, and too early exposure to cold, wet, and fatigue, with a poor and innutritious diet during convalescence. These fatal complications are mostly found in horses which have been sick under the circumstances above mentioned, and rarely in horses which have been carefully kept previous to the attack, and well attended during and after the fever. Horses convalescing from this epidemic should have a highly nutritious and easily-digested diet. To counteract the tendency to scurvy, iron compounds are useful, and such food should be especially selected as is rich in the normal saline constituents of the blood, and in any lacteous compounds. Such are the various bulbous roots, namely, turnips, carrots, ruta baga, potatoes, etc. These, to be readily masticated and digested, should be boiled and mixed with bran or other mash.

Naturally that large class of epidemiologists who trace all such extended epidemics to the action of infusoria, fungi, sporules, or inferior microscopic organisms of some kind, will endeavor to discover in this striking example of progressive disease fresh proofs of their theories. So far all such

studies as applied to this instance have proven futile, and we are really no nearer an understanding of what the real cause is than we ever were, and may as well take refuge in Sydenham's "epidemic constitution of the air" as in any later guess.

Notes and Comments.

The Bromides of Ethyl and of Methyl.

The bromide of ethyl or bromhydric ether, C_2H_5Br, is a liquid, not very volatile, obtained by distilling four parts of bromide of potassium in powder with five parts of a mixture of two parts of strong sulphuric acid and one part of rectified alcohol. This body is a very powerful anæsthetic and entirely inoffensive. An atmosphere containing 8 to 9 per cent. of this vapor, produces, by inhalation, a general insensibility; the respiration remains tranquil, the pulse calm, and the period between the first and second degree of narcotization is so rapid that the period of muscular excitation is scarcely appreciable. When the inhalation of it is ceased the return to consciousness is rapid. It is produced in three or four minutes, for its insolubility in the blood favors its elimination.

The bromide of methyl, CH_5Br, is a gas at the ordinary temperature, and is obtained with a mixture of 50 parts of bromine, 200 of methylic alcohol, and 7 of phosphorus, at a low temperature. Under the influence of cold it becomes a liquid. It has the same properties and the same faults as bromide of ethyl. It is also a powerful disinfectant, and as such, these two bodies will enter into use. They destroy and decompose organic matter.

The Progress of Homœopathy.

The editor of the *British Medical Journal* says, in an article discussing the propriety of consulting with homœopathists :—

Homœopathy, which began as a delusion, is now rapidly ending as a fraud. The ignorant delusion that all diseases were varieties of the itch, which was a cardinal point of homœopathic belief at the outset, has faded before the discovery of the itch-insect. The mystic folly of extreme dilutions, the potency of increasing weaknesses, the value of direction in shaking and stirring, are fading follies likewise; their place is being taken by frauds. We hear now of castor oil and hydrate of chloral, tincture of aconite and tartar emetic, in heroic and almost poisonous doses, to produce purgation, give sleep, reduce the heart's action, and promote secretion. It no more becomes us to assent to a fraud than to yield to a delusion; and now more than ever, perhaps, must it be held disgraceful for a physician to hold any direct or indirect intercourse with a homœopathist, whether "hard-shelled" or "soft-shelled," globulist or trimmer.

The Washington National Monument.

It is in the recollection of many of our readers, that the American Medical Association, provided a stone, at a cost of one thousand dollars, for the Washington National Monument to be erected at Washington City. We were sorry, on a recent visit to that city, to observe that the stone, which is one of the most beautiful in the whole collection, has been damaged, probably by some relic hunters, who could not resist the temptation to break off the fingers of the figure of Hippocrates. The Association should call the attention of the corporators of the Monument Association to this act of vandalism, and the stone should, if possible, be repaired before it is put in place.

Local Pain in the Right Side in Pregnancy.

This symptom, occasionally seen in obstetrical practice, is the subject of an inquiry in the *British Medical Journal*. Some of the replies are as follows :—

"The local pain in the right hypochondrium, mentioned as occurring in the latter months of pregnancy, is probably due to irritation of and pressure on the hepatic nerves, which are chiefly derived from the solar plexus. Having had several similar cases lately, which have derived marked benefit from the following formula, I would recommend him to make trial of it, and shall be glad to know the result.

℞—Potassii bromidi,	℥j.
Tinct. hyoscyami,	℥ss.
Spiritûs chloroformi,	℥j.
Aquæ ad,	℥viij. M.

S. A sixth part to be taken three times a day."

"During an active practice of more than thirty-five years, I have met with several such cases, and in the times of depletion used to resort to the lancet with considerable success

but of late I have been in the habit of employing with benefit the following liniment:—

℞—Liquoris ammoniæ fort, ʒiij.
Tincturæ belladonnæ,
Tincturæ opii, āā ʒiij.
Liniment. sapon. ad, ℥iv. M."

"Relief is immediately experienced by a change of position from sitting to standing, and by leaning towards the left side, or lying on it.

"Small doses of hydrargyrum cum cretâ, combined with soda, and followed occasionally by more active aperients, are the internal remedies which I have seen of most avail. Externally, pledgets of lint soaked in laudanum seem to give most relief. I have never found it necessary to employ leeching."

Wall Papers.

Dr. Corfield, an English Medical Officer, in a recent report says :—

It has been shown that infection hangs about wall-papers even for many years; and I am of opinion that, in all cases where a room has been occupied by a person suffering from an infectious disease, the paper should be washed with carbolic acid and water, and stripped off the walls and burned. This is done in all cases of which we have cognizance.

Deaths from Lightning.

During the months of July and August, 1872, *thirty-six* persons were killed by lightning in the Northern and Eastern States of our country. During the ten days succeeding July 3 no less than fifteen persons were killed by this means in these States. A writer in *Appleton's Journal* truthfully remarks that "a succession of three railroad accidents, in each of which five persons had been killed, would have horrified the community; but these fifteen deaths by lightning seemed to have attracted very little attention. From the report of Bowdoin, presented to the Academy of Sciences in 1864, we learn that in France, during twenty-nine years, an average of seventy-seven persons lost their lives, and 232 were injured per annum. In Mecklenburg it was found that one person was killed out of every 247,200 inhabitants."

Diet of Literary Men.

The London correspondent of the Birmingham *Morning News* alludes to a new book that has recently appeared, containing remarks about the diet of certain literary men; and he states that he is acquainted with a well-known writer who cleaves to oatmeal porridge when he is in working trim. In this respect the said writer imitates Gerald Massey, who swears by oatmeal porridge as a brain inspiring compound. "There is a deal of phosphorus in oatmeal," Mr. Massey says, "and phosphorus is brain. There is also a large amount of phosphorus in fish. Consequently I never miss having a fish dinner at least once a week, and take a plate of good, thick, coarse, well-boiled Scotch oatmeal every morning in my life."

On Longevity.

Dr. Grey, some years since, published some statistics showing the average age at which the following classes died, after they had attained the age of fifty-one:—

Clergy	74	years.
Lawyers	72¾	"
Medical men	73	"
Learned professions collectively.	76½	"

He afterward added the following observations, which embrace only the most eminent of these professions, with the following results:—

Clergy (bishops and archbishops)	70¼	years.
Lawyers, judges, etc	67	"
Medical men (baronets, etc)	74½	"

From his observations he makes the following deductions:—1. That members of the three learned professions occupy, in respect of the duration of their lives, a favorable position among the educated classes. 2. The difference in the duration of life among the three learned professions is not considerable. 3. That the three learned professions occupy the following relative position in respect to the duration of their lives, the longest being placed first: medical men, clergymen, lawyers. The vital statistics of Boston show that "gentlemen," or those living on their incomes, are still longer lived than either professional men or farmers.

Syrup of Eucalyptus.

One hundred grm. of the cut leaves are macerated in 1 litre of boiling water, in a covered vessel, six hours, and expressed. The infusion is decanted from the sediment, and in every 100 grm. of the liquid 190 grm. of sugar are dissolved, in a covered vessel placed in the water-bath.

Correspondence.

Ergot in the Treatment of Cystitis with Hæmaturia.

Eds. Med. and Surg. Reporter:—

In compliance with your request that country practitioners shall give you the benefit of their experience and opinions, and with a desire to have thoroughly tested the therapeutics of a remedy that I am satisfied is of inestimable value, I report the following case :—

I was hastily summoned, after dark, October 18th, 1872, to Mr. J. S., a gentleman aged 72, who had fallen on his porch, unable to get into his house without assistance.

I found him suffering excruciating pain, referred to perinæum and pubic region, voiding from the bladder clots of blood. Ordered a hot bath, after which I introduced the catheter, bringing away about half a pint of very bloody urine; administered (internally) chloroform and left him sleeping quietly and free of pain.

Called the next morning, October 19th. Full bounding pulse; skin hot and dry; voiding small quantities of very bloody urine incessantly, accompanied with great pain and with tenderness upon pressure over the pubic region. There was nothing to lead me to believe that the kidneys were implicated; the trouble was with the bladder, and with that alone. It was a pure case of idiopathic cystitis with hæmaturia. I gave

℞	Ant. et. pot. tart,	gr. $\frac{1}{6}$
	Sulph, morphiæ,	gr. $\frac{1}{4}$,
	Elm water,	℥j

To be repeated every three hours unless symptoms abated and my patient slept, in which event he was not to be roused.

Drink slippery elm water, diet strictly antiphlogistic.

This treatment was continued several days, and my patient improved, the urine becoming free of blood and passing without pain, appetite, strength, etc. good. The bowels, however, had not been moved for several days, and I directed an enema of cold water and salt. Instead of this my patient took a tablespoonful of ol. ricini, and this not bringing about the desired result, he repeated the dose some three or four times, which brought on violent purging, straining, and all his former symptoms greatly aggravated.

I now gave everything calculated, in my opinion, to meet the emergency. I will not, for fear of proving prolix, enter into detail, but give the treatment in general terms. Ant. et. pot. tart., Norwood's tr. verat virid., bi. carb. pot., etc. Injections into the bladder of sol. per. sulph, ferri., also acetic acid. Applied ice over the pubic region and perinæum, also introduced continually (or rather made the patient do so) small portions up the rectum.

All my efforts proved futile; my patient grew worse; true, I was enabled to relieve his suffering by the administration of morphia, chloroform, etc., but the disease was triumphant, the quantity of blood was not in the least diminished, and my patient was rapidly succumbing to the drain upon his system, and showing signs of anæmia. I now gave

℞	Fluid ext. ergot,	gtt xx.
	Tr. ferri chlo.,	gtt x.

To be repeated every three hours.

In twenty-four hours the quantity of blood in the urine was greatly reduced, and in thirty-six had entirely disappeared; on the third day after the administration of the ergot my patient was convalescent. I saw him to-day, a week since I discontinued my visits, and there has been no return of the disease; the ergot, however, had been continued three times a day.

In this case I had the valuable assistance and advice of Drs. Tanner and Reynolds, gentlemen of ability and experience, and they express themselves highly pleased with the action of the ergot.

I should not neglect to add that my attention was attracted to ergot as a general styptic, by your valuable journal.

I would go more fully into my opinion of its modus operandi, but that has been fully set forth in your journal, May 25th, 1872, No. 21, page 464, and other numbers.

I am thoroughly satisfied, in all cases requiring an astringent to blood vessels, it will prove a true friend that will not desert you in the hour of need.

Wm. F. Alexander.

Duffields, West Va., November 12th, 1872.

So-Called Incurable Diseases.

Eds. Med. and Surg. Reporter:

In the Reporter of October 26, 1872, there were some kind and judicious remarks by E. P. Hurd, M.D., about my use of the terms complete and permanent cure. I am well aware that every medical practitioner who has much practice must encounter many absolutely incurable cases. By the use of the above-named terms I mean that remedial agents, judiciously employed, are capable of so removing various diseased conditions that the same conditions have not returned during the years which have since elapsed. For example, Mrs. M. Boden, 293 E. Monument street, Baltimore, who during six years had suffered with violent cephalalgia, has had no return of it since my treatment of it, about eleven years since.

Mrs. M. E. Cuddy, 331 E. Monument street, Baltimore, who had suffered throughout twelve years with eczema of her hands, has, since I treated her, about, I think, thirteen years ago, never suffered as before. She told me that her hands were now as sound as a silver dollar.

Mrs. Carback, 164 N. Caroline street, Baltimore, whom I treated about, I think, eighteen years ago, has had no bronchial cough

since. The same is true of Mrs. Ray, 83 N. Broadway, Baltimore, during, I think, about fourteen years. Yet these are chronic cases, not only of the above-named, but also of many diseases which are called incurable.

THOMAS BARROW, M.D.

Baltimore, Md.

NEWS AND MISCELLANY.

Lecture by Dr. Paul Shoeppe.

Last week a rather small audience gathered at the Assembly Building, in this city, to hear a lecture by Dr. Paul Shoeppe, who for nearly four years was under sentence of death at Carlisle, Pa. He took for his subject "Science in Law." The discourse referred more particularly to his own case, and his remarks were listened to with attention.

The speaker began by stating that the idea has often been expressed that there is no science in law, and ex-parte testimony should always be excluded. But the correct administration of justice cannot be given properly without science in the law. By tearing down science you bring forth a state of affairs that leads to confusion and ruin. There are men in science, however, who are in favor of its exclusion in matters of law. Lawyers have no right to claim infallibility to law as a science without allowing the same to others, because contradictory opinions arise in all sciences.

The science of law is an entirely different thing from science in law. Many things occur which are susceptible of proof in science that cannot be proved in law. There are some practitioners who claim that science is infallible. A science must not only be acknowledged as such, but be founded upon facts. It must stand upon principles that are susceptible of proof. The testimony of medical men is always admitted, but their opinions are founded only on the observations of others. Christianity has made many advances in late years, and now no science is complete without it. Science may be made use of by courts of law in the calling of experts, but one unskillful pretender may do irretrievable damage by making the people think science is not reliable. The question must be decided by the court as to who is a scientific expert and who is a quack.

The speaker then took up the testimony in his case, and said that the *scientific* men who swore against him were nothing but quacks and pretenders. The laws, he continued, should be reformed in relation to post-mortem examinations, and scientific persons should be appointed, either by the Governor or the courts, and they should make these examinations, and be held responsible for their correctness.

The laws of the land, concluded the doctor, have declared me innocent of the charges preferred against me, but have furnished me no compensation for the loss of business, reputation, or property, or for my sufferings. If they should, however, work a reform in the law, then I have not suffered in vain.

Connecticut River Valley Medical Association.

The Connecticut River Valley Medical Association held a meeting at the house of Dr. H. D. Holton, in Brattleboro, Vermont, Wednesday, Oct. 30th. The President and Secretary being absent, Dr. Stedman, of West Brattleboro was chosen President, and Dr. Swift, of Wilmington, Secretary, *pro tem.* Two cases of extraordinary interest were presented for personal examination, one of them by Dr. McIntyre, of Concord, N. H., in his own person. Dr. Goodwillie, of Vernon, read an interesting paper which elicited considerable discussion. Several important cases were reported verbally by members of the association.

[Will not the Secretary report the more important of these cases?—EDS. MED. AND SURG. REPORTER.]

Medical Society of the State of Pennsylvania.

During the necessary absence of the Treasurer of the State Society from the city, and until further notice, Treasurers of County Societies will please make their remittances to Dr. W. B. Atkinson, Permanent Secretary, 1400 Pine street, Philadelphia.

L. S. BOLLES, Treasurer.

November 16, 1872.

Ill Health of Dr. Druitt.

Dr. Druitt, well known for his professional and literary labors as an author of standard surgical works, as a leading laborer in the cause of sanitary progress, and as the Editor of the London *Medical Times and Gazette*, is compelled by ill health to retire for two years to a more genial climate. At a meeting attended by many of the leading members of the profession of London it was resolved to initiate a subscription with a view to the public recognition of his eminent services.

Statistics of Life Insurance.

The report of the Statistical Congress, recently in session at St. Petersburg, has not yet reached the United States. The Congress paid a high compliment to Mr. Wm. Barnes, late Superintendent of the Insurance Department of the State of New York, by electing him to prepare a volume on the statistics of life insurance in the whole world, to be presented at the next meeting, three years hence.

Small-Pox in Vienna.

There is no improvement in the health of Vienna, as regards the epidemic of small-pox. During the week ending October 25th there were 103 deaths from the disease; and the average number of cases under treatment daily was 428.

The Cholera.

Unpleasant news comes from the Russo-German frontier. The weather of the past month, so unseasonably mild and excessively wet, has caused a somewhat alarming new outbreak of cholera at Warsaw; and the epidemic is said to be advancing toward the frontier. Six cases were reported in Dresden on Nov. 9th. The Italian Government have quarantined vessels from the Levant. In India, on the contrary, a writer in the *Pall Mall Gazette* says:—"In the Bengal Presidency the epidemic has come to a close. Though less fatal as regards numbers than many that have preceded it, it has been of an unusually virulent type where it has attacked. I have not been able to obtain trustworthy statistics of its effect on the civil native population, but I gather that the deaths fall not far short of 100,000. The returns from the army are, of course, accurate and up to date. Wisely, and for the same reason that the customary volleys at military funerals are discontinued during epidemics, these returns are not published; but from the latest I have seen, brought up to the middle of September, it appears that some twenty-four cantonments have been, to use the word in vogue with cholerologists, invaded. The whole number of European troops attacked, inclusive of women and children, is 750, of whom 480 have died. The native troops, with the exception of the large garrison of the Punjaub frontier force at Kohat, have escaped with comparative impunity, having had in all less than 100 cases, with from 30 to 40 deaths only. At Kohat, however, the disease was very fatal, there having been nearly 80 deaths out of 130 seizures.

A Fountain of Soup.

Liebig's extract of meat, which makes an excellent soup, is hereafter to be supplied to the poor classes of Paris at a merely nominal cost, from regular fountains. A. M. Levy announces that he will inaugurate a fountain of soup in his establishment, and, for the first two days, will distribute the same gratis to the public.

Dr. J. H. Boardman, a well-known and highly esteemed physician of Portsmouth, N. H., for nearly half a century, has recently been placed in the McLean asylum, at Somerville, for treatment. The loss of two sons at sea, with recent severe sickness of both himself and wife, produced serious disorder of the brain.

The Commissioner of Pensions has appointed as a board to examine surgeons in Brooklyn, Drs. Wm. McCullom, N. W. Leighton, and Albert E. Sumner. The two former belong to the regular school and the latter is a homœopathist.

London has a new industry, namely, the manufacture of cripples. The police have discovered a firm of human fiends that take children of tender age and twist their limbs so that they may be bandy-legged or otherwise deformed, according to the wish of the parents. The object of this is to make the unfortunate infants objects of charity. A regular tariff of prices is demanded, a thorough and complete maiming costing four pounds. The members of the concern and about a dozen employees have been imprisoned.

MARRIAGES.

Donaldson—Foster.—Oct. 31, 1872, at the residence of the bride's father, Bridgeville, Pa., by Rev. C. G. Braddock, John B. Donaldson, M. D., and Lizzie, daughter of Walter Foster, Esq.

Ives—Culbertson.—In Chambersburg, Pa., Oct. 2, by the Rev. J. A. Crawford, Chauncey Ives, of Grand Rapids, Mich., and Emma, eldest daughter of Dr. Edmund Culbertson, of Chambersburg, Pa.

Kammerer—Emery.—By Rev. J. S. Marquis, assisted by Rev. W. F. Brown, Oct. 31, at the Presbyterian Church of Pigeon Creek, Pa., Mr. Will S. Kammerer, of Kammerer's Mills, and Miss Mattie G., daughter of Dr. Boyd Emery, of Dunningsville, Washington Co., Pa.

King—Niccolls.—By Rev. Samuel Wilson, D. D., of El Paso, Ill., Oct. 24, Dr. Franklin T. King, of Wilmington, Ill., and Mrs. M. K. Niccolls, of Bloomington, Ill.

Lane—Duncan.—By Rev. W. S. Eagleson, Oct. 10 at the residence of the bride's parents, William H Lane, M. D., of Lock, O., and Miss Mollie O. Duncan, of Fredericktown, O.

Marshall—Cowan.—Nov. 5, at the residence of the bride's father, Dr. W. V. Cowan, Mr. George A. Marshall and Miss Mary C. Cowan, all residing near Hardin Station, Shelby Co., O.

Paul—Nishwitz.—Nov. 13, 1872, at the residence of the bride's father, Millington, N. J., by Rev. S. W. Dana, Dr. J. Marshall Paul, Jr., of Belvidere, N. J., and Miss Emma, daughter of Frederick Nishwitz, Esq.

Rowland—Heiss.—On the 7th inst., by Rev. Wm. J. Holland, Mr. Joseph S. Rowland and Miss Clara A. Heiss, daughter of Dr. John S. Heiss, both of this city.

Thompson—Davis.—Nov. 8, Dr. John H. Thompson, of Washington, D. C., and Nellie B. Davis, daughter of Benj. W. Davis, Esq., of Brooklyn, by Rev. Dr. Abercrombie, Rector of St. Matthew's, Jersey City.

White—Ake.—Oct. 29, by the Rev. N. G. White, Dr. T. Henry White, of Williamsburg, Pa., and Miss Clara V. Ake, of Blair Co., Pa.

DEATHS.

Bradley.—Dr. E. G. Bradley, of Toledo, Ohio, a well-known physician, was found dead in his room on the morning of the 14th.

Holmes.—In West Waterville, Me., Oct. 19, Mrs. Lucy A. Holmes, wife of Dr. M. H. Holmes, aged 56 years and 5 months.

Stewart.—In Pittsburg, Pa., October 31, 1872, James H. Stewart, M. D., in the seventieth year of his age.

Watson.—At Chestnut Hill, Philadelphia, Nov. 10, in the 31st year of his age, Goodwin Watson, only son of the late Dr. John Watson, of New York.

Woods.—In Bellows Falls, Vermont, Oct. 26, Charles Henry, youngest son of Dr. O. F. Woods, aged 22 years.

THE

MEDICAL AND SURGICAL REPORTER.

No. 822.] PHILADELPHIA, NOV. 30, 1872. [Vol. XXVII.—No. 22.

Original Department.

Communications.

TEACHING THE DEAF AND DUMB TO SPEAK.

By Laurence Turnbull, M. D.

Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

Continued from page 454.

Speech is voice modulated by the throat, tongue, and lips; this modulation of the voice into speech is effected by changing the form of the cavity of the mouth, lip, nose, and throat, by the action of the muscles which move the walls of these parts. This is not to be taught simply by imitation, as in the old method, but the pupil is made to comprehend the use of every portion of the vocal apparatus by making sounds before attempting to speak words; and the new alphabet of Mr. Bell is one which is specially adapted to the purpose. By the old method, the child had simply the lips of the teacher to study; no proper alphabet or illustrations on the blackboard to assist him in the form in which the lips, tongue, etc., were to be placed; so that hundreds of sounds which a child could not obtain by the imitation method alone, have been accomplished by means of visible speech. A bright adult deaf mute, by this method, has been able to acquire most of the sounds of the English language in ten lessons.

In 1869 the first attempt was made to communicate a knowledge of "Bell's symbols" to deaf mutes in a private establishment in London, conducted by Miss Hull. No difficulty was found in giving the idea to four children, the eldest about twelve and the youngest seven years of age, and nearly all the elementary sounds of the English language were obtained from them in a few days.

Lectures were then given in various towns of the United States. Prof. E. M. Gallaudet, President of the College for Deaf Mutes at Washington, thus expresses himself in regard to visible speech: "Use has been made of this system with gratifying results. It has rendered most valuable service to this department of deaf mute instruction."

In the Boston Day School for Deaf Mutes, which, by the way, should be established in every large city, Mr. A. G. Bell, son of Prof. Bell, taught the pupils by his father's method for six weeks, also instructing the teachers in the theory of the system. Of the results of this experiment, the following extracts from letters addressed to him will show the good results obtained. The committee say:—

"The system of visible speech introduced by you has given the teachers an instrument of incalculable value in teaching deaf mutes (congenital as well as others) to articulate clearly and correctly."

Miss Fuller, the Principal, gives the following opinion:—

"I can say with confidence that I have found 'visible speech' of the greatest assistance."

The consonants b, d, and g, which are the most difficult to obtain by imitation, are, by means of the symbols, produced with great ease and accuracy; and the consonant combinations, such as ct, ks, nd, etc., which were often very faulty, are, by this system,

acquired perfectly. In teaching vowels it is of especial value. The visible speech symbols make the child conscious of the correct position of the mouth for producing these sounds. Hitherto such elements have been our greatest difficulties. I have been able to correct, in several cases, very imperfect sounds which had baffled all attempts under the old system of imitation. The superintendent, John D. Philbrick, Esq., thus indorses what has already been stated:—

"Heretofore, instruction of deaf mutes in artificial articulation has been wholly imitative and empirical; and although the system is extensively employed, it has produced useful results only at the expense of incredible labor and patience on the part of both teachers and pupils. You have, by your experiment in our school, proved the practicability of producing in congenital deaf mutes, perfect articulation, with vastly less labor than has been required to produce only imperfect articulation. What is still more wonderful, if possible, you have succeeded in enabling deaf mute pupils to modulate the voice, by giving a higher and a lower pitch, and upward and downward and circumflex inflections. The system* does not, as stated by Mr. Bell, interfere with any existing plan of education. Visible speech takes no part in the contest between articulation on the one hand, and signs and manual alphabets on the other. Here is a means by which you can obtain perfect articulation for deaf mutes; make what use of it you choose.

He places it in the hands of the teacher with general directions how to use it.

"Visible speech" is not necessarily associated with lip-reading. There is no doubt that in schools where lip-reading is employed the symbols will materially assist the pupils by showing them *what to look* for in the *mouths* of *hearing persons;* but this is apart from its greater sphere of usefulness, as a means of communicating articulation.

(c) "Visible speech" does not profess to teach the deaf to *modulate their voices;* it deals with articulation pure and simple; yet deaf mutes may be taught to modulate their voices, and to read with expression by means of visible speech, which aims at representing pictorially the changes of the voice in regard to force, duration, and pitch. This system constitutes an elocutionary, and in its fullest development a musical notation, accomplishing for the throat what visible speech does for the mouth.

We all know that most of the deaf mutes give, on the play-ground and elsewhere, perfectly natural inflections; they laugh and cry like other children, except in a heightened pitch. The problem is to make them conscious of the movements of their voices. Experiments which the writer has witnessed within a few weeks in the American Asylum, Hartford, prove that this can be done. (For this opportunity we are indebted to Prof. Stone and his assistant, Miss Sweet).

(To be Continued.)

* American Annals of the Deaf and Dumb, Visible Speech, by A. Graham Bell, to whom the writer is indebted for a portion of the facts contained in these papers in reference to his father's method. (A. Melville Bell, Professor of vocal physiology, and author of a new species of phonetic writing.)

AN IMPROVED ELIXIR OF CINCHONA.

By C. G. Polk, M. D.,
Of Philadelphia, Pa.

The importance of a thoroughly well compounded elixir of cinchona is so well understood that I may be doing some service to the profession by sending you a formula which has been thoroughly tested. It is as follows:—

℞.	Cinchoniæ sulph.,	ʒiij.
	Quiniæ sulph.,	ʒij.
	Acidi citrici,	ʒiv.
	Acidi sulph. dil.,	q.s.
	Aquæ ammoniæ,	q.s′.
	Cort. aurant. recent.,	ʒij.
	Pulv. cardamomi,	ʒv.
	Alcohol, deodorized,	Ojss.
	Sacch. alb.,	ʒxxiv.
	Aquæ,	Oiv.
	Caramel,	m. xl. M.

Thoroughly bruise the orange peel in a mortar, and mix with the cardamon; pack them in a percolator and pour on the alcohol mixed with one and one-quarter pints of water, and percolate, by adding sufficient water, until three pints have passed. Dissolve the cinchoniæ and quiniæ in four ounces of water by aid of dilute sulph. acid; precipitate the alkaloids, wash carefully, and dissolve in four ounces of a slightly acid solution of the citrate of potassa; mix with the tincture, and filter; add the sugar and caramel, and dissolve without heat.

To this elixir the addition of liq. citrate

of iron, or a corresponding solution of the soluble phosphate of iron of a corresponding strength, produces a ferrated elixir, and two grains of strychnia to the pint produces the elix. of iron, cinchona and strychnia of a fine quality. I should have stated that the citric acid is used in forming the citrate of potassa. This formula is the creation, as far as I know, of Dr. A. D. HAUVERMAN, of Chattanooga, Tennessee, and seems to meet very well every want in an elixir of calisaya. The solution of the alkaloids in the solution of the citrate of potassa is made with a view to forming the ferrated elixir extemporaneously, by adding citrate or phosphate solution, otherwise the sulphates would be preferable.

HOSPITAL REPORTS.

UNIVERSITY OF PENNSYLVANIA.

Service of Prof. D. Hayes Agnew.

[REPORTED BY DE FOREST WILLARD, M. D.]

Stone in the Bladder. Lithotomy.

Gentlemen:—The little patient before you, four years of age, has suffered for two years with symptoms of vesical irritation; slight at first, but now increased to such a degree that his parents have brought him here for relief. His most prominent symptoms now are: a frequent desire to pass his water, great pain and straining in the performance of the act, an occasional sudden arrest of the stream, and lastly, that prominent symptom of irritation at the neck of the bladder, *i. e.*, pulling at the prepuce to such an extent, even, as to cause its decided elongation. This latter sign, let me here remark, is not always an evidence that there is a stone in the bladder, for you will frequently find it present in any of the diseases which cause a local irritation at the vesical cervix. The remote expression of this irritation is attributable to the fact that the nerve-centres are accustomed to refer all impressions received upon the int. pudic nerve to its extremity, and have not learned to locate the precise intermediate point of disturbance, just as a man takes cognizance of his hand after it has been amputated, simply because his nerve-ganglia have been in the habit of referring all sensations to the extremities of those nerves which have been divided.

We have prejudged this case, however. The boy may not have any trace of a stone at all, for all these symptoms may be present in other diseases, as cystitis, irritable bladder, enlarged prostate, etc., etc., although in these latter complaints they are not usually as persistent as in stone. There is, however, a positive means of diagnosis, which I shall now employ, namely, the "sound"—a steel instrument which is not used as frequently as it deserves. It is as important in the diagnosis of vesical and urethral diseases, as is the opthalmoscope in the deep-seated troubles of the eye; in fact, I might lay down the rule that in every case of vesical disease it should be introduced. I now pass this sound, and after a few moments' manipulation am able to discover the presence of a small rough body, and as I attach this sounding-board, of deal-wood to the handle of my instrument, I think that the click will be audible to every person in this room.

This boy has, then, a calculus; but, suppose that we had not discovered it, would that have been proof that none existed? No; for it is a procedure that often fails, from the fact that the stone may hide itself in some little pocket or fold in the mucous membrane, and thus escape the touch of the instrument, or, it may lie in a little pouch which it sometimes makes for itself at the base of the bladder; or, it may be what is called an encapsulated stone; or, again, it may be covered in by the apposition of the walls of a bladder which is empty and relaxed. Some of these difficulties may be avoided by having the patient retain his urine for several hours previous to an examination, or by the injection of a quantity of flaxseed mucilage, but even then it is sometimes necessary to repeat the operation of sounding, two, three, four, and rarely, a dozen times, before your mind is fully established in its opinion. A finger in the rectum, sounds of different curves, and change of position in the patient, may often aid greatly in diagnosis. Could a surgeon receive a rough sensation from the sound and yet no stone be present? Yes, a thickened, roughened, fasciculated condition of the mucous membrane might possibly deceive an inexperienced hand, or a calcareous deposit in the prostrate gland might mislead, or again, the calculus might be urethral. I have myself seen people cut for stone, when none was found, and in one case I remember that the operation was twice performed, the stone being finally discovered suspended, pendulum-like, by a band of lymph from the fundus, after it had been well nigh given up the second time.

If any of you were present at this clinic some two years ago, you may remember also a case in which the stone was exceedingly difficult to find, being held firmly upon the anterior wall of the viscus, by strong bands of lymph. With these precautions then, as to the detection of the presence of such a foreign body, we are ready to devise means for its removal, but while the boy is being etherized, let us study for a few moments the nature of the disease. Calculi may be either nephritic or vesical in their primary origin; in the former case they are the result of a diathesis; in the latter, the diathesis may, or may not be present, but the immediate point of commencement is a nucleus in the form of a foreign body, as a pin, pencil, stick, etc.,

(introduced in sport by boys or men,) or even from a blood clot, or pistol ball. Around this as a centre, the urinary salts deposit themselves in concentric laminæ, urates and phosphates sometimes alternating in the same stone. The uric acid calculus is found in nearly two-thirds of all the cases, the next in frequency being the oxalate of lime or mulberry variety, while the phosphatic concretion is seen less seldom.

The increase in size is sometimes exceedingly slow. You all doubtless remember the large stone (2300 grains) which I removed here last year, and which was of twenty-seven years' growth. The symptoms which we have seen in the case before us are largely due to mechanical irritation and obstruction. In adults we not unfrequently have periods of acute exacerbation, in which all the symptoms are greatly aggravated, and are accompanied by high fever and great constitutional disturbance. Such attacks are called "fits of the stone," and are best relieved by warm baths or fomentations, large doses of opium by the rectum, and occasionally by the administration of anæsthetics.

As the case progresses the symptoms become more urgent, and the mucous membrane is often so inflamed as to give rise to frequent slight hemorrhages or to the presence of pus and mucus in the urine. The urine, let me here remark, should *always* be microscopically and chemically examined in every case of stone, since, if severe renal disease be present, an operation would be very hazardous, in fact, I am confident that many deaths have followed lithotomy from a neglect of this simple precaution. Such examination has been made in the case before us, and finding neither casts, albumen, or other greatly abnormal constituents, we feel assured that we have sound kidneys to assist us.

The boy has also been prepared for the operation by a general constitutional treatment of alteratives, diaphoretics, diuretics, etc. For the past five days he has taken three drops of liq. potassæ in a wineglass of milk, three times in the twenty-four hours. Yesterday his bowels were freely opened by the use of castor oil, and they have been washed out this morning by a full enema, after which an injection of three drops of tinct. opii was given to put them at rest.

The operation which I propose to perform is the ordinary lateral one, commonly known as Cheselden's. For its intelligent performance a thorough knowledge of the anatomy of the parts is essential, yet this is a point neglected by many surgeons. Let us study it carefully.

The perinæum is a lozenge-shaped space, bounded behind by the coccyx, in front by the pubis, and upon the sides by the rami of the pubes and ischia and the sacro-sciatic ligaments. Its size depends upon the position of the limbs. It is divided into two portions, the anterior or urethral or true perinæum, and the posterior or anal. The posterior is divided by the bowel into two fossæ called ischio-rectal. They are triangularly-shaped cavities, with their apices at the junction of the obturator and levator ani fascias, which form respectively the outer and inner boundaries of the fossæ. The anterior boundary of the anal perineum is formed by the middle perineal fascia; the posterior by the gluteus muscle and sacro-sciatic ligaments, while the whole space upon either side of the rectum is filled with fat and connective tissue.

The anterior or urethral perinæum is all that portion in front of a line joining the ischiatic tubers, and is triangular in shape. It is covered first by skin, then by the *superficial perinæal fascia*, in which lie the fat before mentioned, and the inferior hemorrhoidal vessels and nerves. Next comes the *middle perinæal fascia*, a strong membrane covering in the muscles at the root of the penis. The attachments of this fascia upon the sides are to the outer lips of the rami of the pubes and ischia, externally to the crura of the penis, as far back of the tuberosities; in front it is continuous with the dortos structure of the scrotum, and behind arches upward behind the transversus perinei muscles, to attach itself to the anterior layer of the deep perinæal fascia, thus forming the boundary line between the two perinæums. It is this fascia which prevents extravasation of urine in cases of rupture of the urethra, the liquid being unable to force itself backward beyond this partition. Lifting away this fascia we see the transversus perinæi, accelerator urinæ and erector penis muscles, the superficial and transverse perinæal arteries, and the superficial perinæal, and inferior pudendal nerves.

The *deep perinæal* fascia or *triangular ligament*, lies directly beneath these structures. It is the anterior closure of the inferior pelvic strait, and is a strong, dense membrane attached firmly to the symphysis, sub-pubic ligament, and rami of the pubis and ischia, beneath the crura of the penis.

Behind, its anterior layer is attached to the middle perinæal fascia as before stated; its posterior (for there are two, one arising from the anterior, the other from the posterior lip of the rami) curves upward, and is lost in the recto-vesical connective tissue. The point where these fascias converge to meet the sphincter muscles of the anus is called the "central tendinous point of the perinæum." Between the two layers of the triangular ligament lie the membranous part of the urethra, the compressor urethræ muscle (muscles of Wilson and Guthrie), Cowper's gland, the dorsalis penis vein, the pubic and bulbous vessels and nerves, a plexus of veins, and the crura of the penis. Behind this fascia are the vesiculæ seminales, prostate gland, prostatic plexus of veins, vas deferens and neck of the bladder.

Now, in the operation which we propose to do, this anterior perinæum must necessarily be opened into the posterior, and many of these structures must be injured. We must cut

through skin, superficial fascia, inferior hemorrhoidal and superficial perinæal vessels and nerves, middle perinæal fascia, transverse perinæal muscle and artery, a few of the fibres of the accelerator urinæ and levator ani muscles, deep perinæal fascia or triangular ligament, fibres of the compressor urethræ, the membranous and prostatic portions of the urethra, the prostatic gland with its plexus of veins, and, lastly, the neck of the bladder.

The incision should commence one and one-quarter inches in front of the anus, and a little to the left of the median line, extending thence to a line or two outside the central point between the anus and ischiatic tuber. The staff must be held by a good assistant, firmly and immovably against the arch of the pubis, with the groove a little to the left. It must not change its position until the bladder is entered. The practice of pressing it downward so as to cause the perinæum to bulge, I consider as unsafe. As soon as the external incision is made, the left forefinger is introduced into the wound and there retained, guiding the knife and holding the rectum aside until the operation is completed. As soon as this finger detects the staff, the point of the knife is inserted into the groove, when, with one long, pushing stroke, all the structures from the membranous portion of the urethra to the neck of the bladder are divided, and a gush of urine takes place. I do not deem it necessary to inject the bladder. During every step of the operation the edge of the knife should be well lateralized to avoid the rectum. The gorget is often used at this step of the operation, but I prefer to continue on with the same long, narrow bistoury with which I make the first incision. The staff is now withdrawn, and the finger carried into the bladder, when, if the opening already made be not large enough to permit of the passage of the stone, it may be again nicked with the knife, or preferably, dilated to a moderate extent with the finger. The forceps are now introduced alongside the finger, the stone firmly grasped and then withdrawn by a gentle sawing motion, thus slowly dilating the opening if the concretion be a large one. The finger should be again introduced to seek for a second calculus, or for fragments; then a large quantity of tepid flaxseed mucilage thrown in through a large catheter in order to wash out all debris. Hemorrhage is controlled, and then the patient is ready to be drawn up in bed.

Now what are the dangers in this incision. If you carry the knife too far in posteriorly, you may injure the rectum and produce a stercoraceous fistula; too far in anteriorly, and you strike the bulb of the corpus spongiosum; too far forward, the artery of the bulb; too far out, the internal pudic; too far back, the prostatic fascia, allowing extravasation of urine into the connective tissue which is in close proximity to the recto-vesical fold of peritoneum. This latter tissue is so loose that even a worse mistake might occur, namely, not entering the bladder at all.

In regard to the subsequent treatment. In uncomplicated cases it is very simple, the urine being allowed to flow through the opening at will, when it is received upon a folded sheet, one end of which has been placed beneath the patient, and which is to be drawn through and rolled up as fast as it becomes wet, thus keeping the parts clean and unirritated. No catheter is introduced into the wound, no dressing applied, no fixed position demanded, the child being simply allowed to lie as best suits his comfort.

The swelling of the lips of the wound may force the urine through the urethra during the next day, but for the following two weeks it it will probably be passed by the wound, until granulation has occurred to such extent as to cause the stream again to assume the normal route. Perfect cleanliness, good air, milk and beef essence are essentials. The bowels should not be opened until the fourth day, when an enema of castor oil may be given. Of the treatment of complication I will speak in future, as other cases shall present themselves.

(The lateral operation was then performed and a small uric acid calculus extracted without difficulty. The hemorrhage was not sufficient to demand the application of a ligature, soon ceasing of its own accord. The boy had not an untoward symptom, the wound healing so rapidly that he was discharged from the ward in two weeks. De F. W.)

Bursal Tumor.

The next case is a man who has been suffering for several years from a large growth situated just over the metacarpal bone of the thumb. It is regular in outline, but of an elongated form, being fully as large as the original member itself. It is hard at some points; soft and almost fluctuating at others. Its growth has extended over many years and it is unaccompanied by any more pain than a simple stiffness. I am confident that it is simply a very large ganglion developed upon the extensor muscles of the thumb. I also believe that palliative treatment or injections would be of no service, and shall accordingly cut down upon it, and dissect it off the sheath of the tendon, removing all the enveloping wall or cyst. (The operation was then performed and a compress firmly applied to the part. De F. W.)

Hydrocele.

The next case is a little boy six months old, who has a hydrocele upon the left side. It is now increasing in size and must be arrested. I shall therefore to-day simply puncture the sac, draw off the liquid, and then apply a liniment of muriate of ammonia. If this is not successful I shall then pass through the sac a simple strand of silk allowing it to remain in situ until it has produced a sufficient amount of inflammation, when it will be withdrawn. In young children this method of cure is usually all-sufficient.

PENNSYLVANIA HOSPITAL.

Medical Clinic of J. M. DaCosta, M. D., Professor of the Practice of Medicine in the Jefferson Medical College.

[REPORTED BY RALPH M. TOWNSEND, M. D]

Right-Sided Hemiplegia, from Clot and Softening, with Aphasia, following Cerebral Embolism and Bright's Disease—Death and Post-mortem.

The history of the man now brought before you cannot, unfortunately, be given in detail. He was in such a state when he was brought to the hospital that no information could be extracted from him. He was, as you see him now, very ill.

T. B., aged 66 years, was brought to the hospital, November 4th, from his office. There he was found in a comatose condition. It was not known how long he had been so. The statement of those who brought him, if it can be believed, was that he was perfectly well forty-eight hours prior to the attack.

When he came to the hospital his right side was paralyzed; he had complete aphasia, and has not uttered a word since his admission. Sometimes, when spoken to, he will give vent to a thick mumble. He passes his urine unconsciously, although his bladder has not suffered from over-distension. His pupils were somewhat dilated, and responded sluggishly to light. He was freely purged with croton oil; had a blister to the back of his neck, and along with mild nourishment has taken five grains of the iodide of potassium three times daily.

Present examination shows his pupils to be small and contracted, and scarcely responding to light. The hand, when taken up, falls a lifeless mass, and so does the leg. When the sole of the right foot or the inner side of the corresponding leg is tickled or pricked with a pin, but little impression is made, showing that reflex action is almost destroyed. In this respect he is worse than on his admission. A drop of croton oil, three times repeated, also failed to move him yesterday. On his first admission, one drop produced copious purgation. When directed he puts his tongue well out, it is somewhat coated. A strong current of electricity moves the right leg only a little, certainly less than the left. In the left leg it evidently produces pain. We find, therefore, that electro-muscular sensibility is not as good in the right leg as in the left. The face is not much affected, it droops a little and the left corner of the mouth is slightly drawn up; but, as the tongue is fairly protruded and the eyelids rise, we may say there is little facial palsy. As regards palsy, our patient is worse than on admission. As regards his intelligence, he is not worse.

On auscultation the heart gives a marked murmur, systolic, harsh, followed by a second sound which is short. The murmur is heard over the whole region of the heart, but its point of greatest intensity is at the apex. The pulse is strong and tense, it has not reached above 86 since the patient's admission. His respiration is between 22 and 24; and the temperature is 100° F., from which it has varied but little. The man has not been in pain, he has rather been stupid and disposed to sleep. There is no increase of the liver or spleen, no dropsy, no swelling of the feet.

His urine, on first analysis of a small quantity, gives an alkaline reaction, S. G. 1040, and contains a large amount of phosphates and albumen; no sugar.

From what has preceded, we come to the conclusion that this patient has had a clot or clots effused on the left side of his brain, anteriorly, and very likely involving the left corpus striatum. We have to look for this apoplexy in the state of his blood-vessels (which have undergone degeneration), aided by the condition of his kidneys.

It is but fair to presume that this tissue change which has involved the vessels elsewhere, has included those of the brain. If we know that the condition of the kidneys favors such degeneration, we are a long way on our diagnosis. This man suffers from an apoplectic clot, with degenerate vessels, attended with involvement of the heart and kidneys.

We know that motor palsy is apt to be complete when the corpus striatum is involved; and we know that in diseases of the left side of the brain we have palsy of the right, and *vice-versa*. As this man's sensation is also impaired it is likely that the opthalmic thalamus is involved in the disease. In regard to the aphasia, I don't teach you that we should always locate the paralysis of speech in the third frontal convolution of the left side of the cerebrum; but, in a vast majority of cases, it occurs associated with disease of the left side of the brain, and it is the left side of the brain anteriorly and high up that bears the brunt of the mischief.

Nov. 16th. I shall this morning continue the case of our patient, T. B. You will remember that we had reason to believe that the extravasation was of an acute character. Apoplexy, as a termination of Bright's disease of the kidney, is not unusual; and Bright's disease is fatal in a large proportion of cases on account of this effusion. In certain forms of Bright's disease this tendency to cerebral complication is more common than in others. It is apt to happen in advancing stages of chronic tubular nephritis, and still more so when the kidney is small and contracted.

Such was our view in this case, and the absence of dropsy was a striking point in favor of it. We are apt to find, moreover, the capillaries in the brain in a similar condition to the capillaries in the kidneys. Valvular involvements, with some enlargement of the ventricles, are also apt to exist, and thus we see how the effusion is facilitated; and there may be in consequence of the valve trouble and kidney disorder, clogging of the cerebral vessels. Regarding our patient after the last clinic, he

remained just as you saw him. The paralyzed limb showed signs of its nutrition being considerably affected. Bed-sores were limited to the right side, and while one side perspired the other did not. The hand on the affected side also became swollen, œdematous effusion taking place both in the hand and forearm. His pupils remained unyielding to light, and he never spoke, although when told to put out his tongue he did so. His pulse became rapid and barely controlled by aconite.

After you saw him he was again freely purged and blistered: his iodide of potassium was increased, and he took two drops of the tincture of aconite three or four times daily. The medicines had but little effect, and he died this morning.

Post-mortem examination. The kidneys are dense and firm, their tubular matter is much destroyed, thus showing Bright's disease in its advanced stages. Section of the liver shows fatty degeneration of the nutmeg variety. The spleen is small, anæmic, and friable. The valves of the heart are thickened and covered with vegetations. The heart tissue is fatty, being soft and easily torn. The heart is slightly increased in size, but there is no dilatation, on the contrary, the muscular walls on the left side are slightly thicker than normal. It would be hard to find a finer specimen of its kind than this mitral valve with its thickening. The left lung looks anæmic; the right, especially the upper lobe, is congested and denser than normal. The brain is of moderate size. A piece cut off from the top of the convolution shows considerable effusion in the sub-arachnoid spaces. The membranes are injected and have lost their transparency. There is a clot in the left internal carotid, just at its bifurcation, stopping the supply of blood to the left anterior and middle cerebrum. There was also a clot in the anterior right cerebral artery, at the junction of the anterior communicating. The left corpus striatum contained numerous apoplectic clots and was much softened, as were also the convolutions of the island of Reil and those immediately surrounding it. The posterior portion of the left cerebrum did not seem to be affected; and the opposite side of the brain was healthy.

When you take into consideration the portion of brain found diseased, you find it corresponds with that portion whose arterial supply has been cut off by the plugging.

Disease of the left side of the brain, particularly anteriorly, is associated whith loss of speech: this is my experience, although I have met with occasional exceptions. We have a striking illustration in this case of how aphasia is associated with disease of the brain anteriorly.

When we look back over this case, was there anything in the patient's history which could have explained to us the occurrence of this clot? I think not. The disease of the heart might favor such a view, but we never could be certain of it. If this disease had happened in a young person, whose kidneys were unaffected, then we might have more strongly suspicioned clot.

One clinical point in this case, which did not escape notice, would have guided us more, viz: the great throbbing of the vessels of the neck. In cerebral embolism the carotids throb inordinately on the side of the clot.

Where did this plug come from: did it form in the brain? Most likely not; in all probability it originally consisted of one of those vegetations washed from the mitral valves of the heart.

Did we act correctly in this case: should we have done anything else? I think we acted correctly. The point of doubt in my mind was as to whether we should have bled. I came to the conclusion we had better not, for two reasons.

In the first place, although there were the most evident signs of pressure, we thought that it was closely linked to some degeneration of tissue. It had come on in an old man, with signs all over his body of a general breaking up. Our inference was that it was not due to immediate congestion of a previously healthy part, but rather a giving way or cessation of life in such a manner as allowed of easy effusion of blood. We thought the tissues where the effusion took place were, in all likelihood, softened. If, under these circumstances, we had taken enough blood to make a decided impression, we should have withdrawn from the old man that which he could not readily re-supply, and thus we would increase the softening.

2. I was not quite sure as to the duration of the disease. The history was unreliable. I think it had existed longer than was stated. In a younger person, with a distinct history, with signs of degeneration less marked, and where the possibility of embolism existed, I should most unhesitatingly have bled from the arm.

Serous Apoplexy Resulting from Uræmic Coma.

The result of another *post-mortem* examination is now brought before you.

The patient was brought into the house on Sunday, Nov. 17th, in a comatose condition, by a policeman. The latter said he had picked the man up in the street, in the same condition, the previous evening. He was at first supposed to have been injured in some way, but as no marks of violence could be discovered upon him, he was placed in the medical ward. His breath smelled strongly of alcohol mixed with something else. His pupils were natural and responded readily to light; his breathing was whiffing, the cheeks being puffed out at each respiratory movement. His pulse was 120, and very weak. No reflex movement was produced by tickling or pricking the soles of his feet, nor were there any expressions of pain. If the skin on the inner surface of the thigh was pinched, the testicle was retracted.

He was ordered ten drops of the tincture of digitalis every two hours, and was purged with croton oil. His urine was examined by my

assistant,* as is our invariable custom, and was found to be acid in reaction, s. g. 1026, and contained a notable amount of albumen. The microscope showed fatty and granular casts. The man had a slight convulsion on the afternoon of his admission. The next day he tried several times to get up, and succeeding once, fell upon the floor. He was again purged with four drops of croton oil, administered at intervals of two hours, and was ordered five minims of muriatic acid every four hours. Cold cloths were kept to the back of his head.

Nov. 19th, a glass rod dipped in muriatic acid and held before his mouth shows cyrstals. His urine was alkaline, s. g. 1028, and albuminous. He died on the morning of Nov. 20th.

We have therefore a man picked up in the streets, comatose, about whom we know nothing, not even his name. He lies in the hospital with hot skin, his body for the most part relaxed, and with signs of cerebral compression.

What caused the compression? We looked at the head in vain; there was no disease of the heart, no marked lung symptoms, no vomiting. The case was evidently one of uræmic coma.

Looking at the specimens before us we find the liver highly fatty, the spleen soft, the heart healthy. But when we examine the kidneys we find they represent one of the forms of Bright's disease in which considerable exudation has taken place between the tubules, and, in fact, causing the tubular structure in some places to totally disappear. The brain shows some congestion of its membranes (the specimens are yet fresh) with effusion under the dura-mater, the arachnoid, and within the ventricles. The brain is congested, but its structure is healthy. The case is one, then, of serous apoplexy resulting from uræmic coma.

You could not have a more striking example of the latency of kidney disease and its consequences, than this case affords. It also teaches you the importance of examining the urine.

This man might not have been treated at all, and might have died without his condition being made known. This case, therefore, is utterly unlike its predecessor, the non-elimination on the part of the kidneys having poisoned the nervous system. There was also an absence of paralysis, thereby bespeaking general congestion and effusion rather than the presence of clot. There was also present the whiffing and noisy respiration of apoplexy.

The fetor of breath was also characteristic, it remaining long after the alcohol had been eliminated. Had we not examined the urine previously, this peculiar odor would have led us to do so. We endeavored to obtain crystals of muriate of ammonia by dipping a glass rod in muriatic acid and breathing upon it, and were successful. The supposition is that the urea circulating in the blood becomes decomposed into ammonia salts. I will not lay stress on this, because my assistant obtained crystals from his own breath in the same way.

We purged this man freely, set his kidneys going with digitalis, and gave him five minims of muriatic acid three times daily. We debated blood-letting at his bedside, and concluded not to bleed, on account of the great debility of his pulse. Otherwise we should have depleted him freely by cut cups.

In these cases our patients' safety lies in free purgation. We can get rid of the urea sometimes in this way. Also use diaphoretics, and try to get the kidneys going. The mineral acids are given to counteract the alkaline condition of blood that ensues. The urea becomes decomposed into carbonate of ammonia, and muriatic and benzoic acids are given to counteract.

A good deal of our success depends upon the amount of disease of the kidneys. In such a case as this, where the disintegration is advanced, therapeutics are not apt to be productive of very great results, and the urea and other dangerous elements go on increasing until death ensues.

Does the fact that the patient passes his urine stand in the way of this view? No. This man passed his water in natural quantity. The only thing here to guide us would be qualitative analysis.

A medico-legal point here arises. Suppose marks of violence had been detected about this man's head. His death would, in all probability, have been attributable to injury, when it should have been attributed to kidney trouble. I remember such a case where a man was found comatose with a laudanum bottle in his pocket. He had taken but twenty minims. He died, and post-mortem examination showed the same conditions as we have here. This again shows the latency of the affection. Deduce then the practical lesson in all these cases with brain symptoms to make an accurate examination of the patient's urine.

* Dr. Meigs, resident physician, to whom I am indebted for the clinical histories accompanying these reports. R. M. T.

New Cinchona Alkaloids.

Dr. Howard regards the alkaloid previously described by him from cinchona bark (*American Chemist*, Aug. 1871, p. 70), as identical with the quinicine, of Pasteur. He finds that quinine and quinidine when heated in sealed tubes with excess of acid, are slowly converted into quinicine. Normal cinchonine sulphate heated with glycerin, becomes cinchonicine. The salts of quinicine are similar to those previously described. Cinchonicine is also a liquid; its salts crystallize well, and are identical, whether prepared from cinchonine or cinchonidine.

Editorial Department.

Periscope.

Peritoneal Tuberculosis.

Dr. Kanlich, as quoted by the *New York Medical Journal*, says of this disease:—

The fever-symptoms at the commencement of the disease are generally very slight; exceptionally there occur at once a marked rigor, great heat, and great debility. In one of the author's cases there occurred at once startling rigors and consequent collapse. In the further course, occur nightly exacerbations of usually moderate intensity, and night-sweat; still there are remissions of several days or even months. In regard to the tenderness (pain), the greatest differences present themselves: pain is at one time very slight; again, although rarely, at the very outset, very severe and extended, but has nothing characteristic. Very variable is the condition of the exudation; there occurs with the development of the tuberculosis at times a slight, at others very considerable, peritoneal effusion. In single rare cases no full effusion whatever occurs during the entire course of the disease, but, instead of this, merely band-like thickening of the strongly-retracted abdominal walls. Also an existing effusion may be subjected to great variations; it may be either entirely resorbed, and then those phenomena may become marked which depend on the neoplasm itself, and especially on the false membrane; variously-shaped bosses and tumors become evident, sometimes placed transversely, corresponding to the shriveled, thickened, network; again, the intestinal folds form several convolutions contracted against the vertebræ and separated by deep depressions, which are covered with thick, and appear like large, rounded tumors. As of rare occurrence, it deserves mention that a largely-developed pseudo-membrane, by adhesion to the abdominal walls, may effect a complete separation of the cavity, so that, at the same time, a decided *hydrops saccatus*, and, besides this, a free effusion into the abdominal cavity, may be present.

A constant symptom from the commencement of the disease until (through the mechanical relations of the pseudo-membrane) even after the involution of the local affection, is a greater or less degree of meteorism; this is probably mostly owing to the implication of the muscular layer of the intestines; if adhesion of the intestines and shriveling of the mesentery have occurred, it is no longer, as before, the upper portion of the abdomen which is pressed forward by the crowded intestines; by repeated observations there is found here and there a changing reverberation of the otherwise dull, tympanitic percussion-sound. As well through the pressure of the fluid in the peritoneal sac, as from the contracted processes, derangements of circulation occur, and consequently œdema of the lower extremities. The spleen is generally enlarged, either from acute tumefaction or through amyloid degeneration. As to the condition of the kidneys, the author repeatedly observed a lethal termination after a sudden copious elimination of a clear, water-like urine, with cool extremities, and imperceptible pulse. Kanlich assumes three different forms of the clinical course of peritoneal tuberculosis: 1. The disease begins suddenly with marked fever-phenomena, circumscribed pain at one spot, or over a greater extent of the abdomen, and repeated severe vomiting meteorism. Stypsis, on examination, shows the objective signs of a circumscribed peritonitis (pain on pressure, slight distention of the belly, increased resistance and dullness); after a shorter or longer improvement of all these symptoms the same scene recurs, and the process extends with intermissions over the whole belly. It finally comes to a complete picture of peritoneal tuberculosis, with all its signs as above. The entire process lasts several weeks, the patient growing very thin meanwhile; after a longer pause, in which only the consequences of intestinal adhesions show themselves (stypsis, vomiting), and in which the patient continues to grow meagre, the case ends with a final pleuritis. At the same time, caused by the local processes, there occurs a copious intestinal hemorrhage, or a secondary peritonitis through perforation.

2. A second series is formed by those cases which generally come under treatment with phenomena of ascitis, with or without œdema of the lower extremities. Preceding the development of the ascites, occur slight pains in the abdomen, a feeling of pressure and tension, occasional vomiting and stypsis, loss of appetite, and slight fever-movement. Besides the other signs of ascites, meteorism and retarded movement of the intestines. After a long continuance of this condition, it proceeds, with a marked increase of the fever, to an effusion into the pleural cavity and the pericardium, and this consequence of the similar affection of several serous membranes assures the diagnosis. The picture of the disease may be changed by the fact that the exudation into the peritoneal sac is combined with hemorrhage, which is recognized by a sudden paleness, cold extremities, very frequent, small pulse, faintness, etc.

3. The cases included in this group are marked by a "decided involution of the process." After long continuance of the disease as circumscribed to the peritonæum, the fever-symptoms are wanting entirely; with a decrease of the hydrops and increased diuresis, the conditions of assimilation improve; there remain

behind, perhaps, only slight meteorism and certain disorders in the function of the intestinal canal produced by the anatomical lesions; or the peritoneal contractions are evident to the touch. After a long standstill, perhaps for months, even in these cases there follows tuberculosis of other serous membranes, of the pericardium, the pleura, or acute miliary tuberculosis, and a fatal termination is almost inevitable. The diagnosis is beset with many difficulties, since, as we have seen, there is no characteristic symptom. The exclusive limitation of the hydrops to the lower half of the body, and the absence of cyanosis, lead to the exclusion of heart or kidney-disease. If the lungs, apart from the compression by the ascites, are healthy, and the heart, apart from its high position, sound, and the urine normal, we have less difficulty in the diagnosis.

Evidences of Degeneration and Hereditary Neuropathies.

Wohlrab, quoted in the *New York Medical Journal*, says:—

It is well known that in children of parents with mental or nervous diseases, disorders of the nervous system occur, sometimes similar, often, however, of an entirely different kind, and with greater intensity; it is here the question of a degeneration of the race, which is also often signalized by congenital departures from the formation of certain organs, even not belonging to the nervous system frequently, or by the presence of such signs of degeneration. To Greisinger is due the merit of having most expressly and repeatedly called attention to the value which these diagnostic signs possess as accompaniments of a large sum of hereditary psycho- and neuropathies.

As the physician in private practice has frequent opportunity of meeting such signs of degeneration, it may not be without benefit to reproduce them in the series as given by Wohlrab:

1. Deformities of the ear: narrow ear, narrow helix, extension of the upper skin of the ear-lap, without a break or with only slight indentation of the skin of the cheek; frequently rudimentary ear laps.

2. Of the eye: coloboma of the lids, of the iris, abnormal size or congenital atrophy of the bulb; platymorphia and enthymorphia of the bulb, asymmetry of the cornea and the lens, excessive myopia, different coloration of the two irides.

3. Smallness of the body.

4. Of the genitals: fissured sexual development, abnormalities of the genitals (errors of development of the penis, defects of the uterus), sterility.

5. Defective formation of the teeth: as abnormal placement of the teeth—twisting on their long axis, abnormalities of size, dark transverse lines on the incisors.

6. One-sided action of the N. facialis.

7. Unfavorable development of face, among which hare-lip is to be included.

8. Abnormal formation of the skull.

9. Diabetes.

10. Of the organs of speech: stuttering, too high or too low a pitch of voice.

11. Of the external skin: nevi, telangiectasis.

12. Arrest of development in the members: defects of the fingers and toes, absence of a part or the entire limb, etc.

13. Also abnormalities of the internal organs certainly belong here, but the author is not able to give any observations of his own. Such signs of degeneration are rarely met with singly; they are generally several; most numerous and most marked occur in idiots. These signs of degeneration point to the hereditary affection of the individual and his blood-relations, but are not by themselves a measure of the neuropathic infection; for this only the sum of the psychical, motor, sensitive, and trophic neuropathies can avail. That, in spite of the large sum of symptoms already mentioned, the betrayal of possible signs of degeneration is not exhausted, is evident when we consider that, for example, of the anomalies of the growth of the hair, rachitis, curvature of the bones, goitre, etc. (which, much more frequently than many of the signs already mentioned, may accompany degeneration, or, in the author's words, point to an hereditary influence), no notice is taken.

On the Resuscitation of Animation in Newly-born Children.

Dr. J. Gregory writes to *The Doctor:*—

In addition to the means already employed for the restoration of apparently stillborn children, I have for some time used, with considerable benefit, a simple but most important additional manipulation. It is not mentioned in any work on midwifery with which I am acquainted, nor do I know any practitioners who use it. For these reasons I bring it forward.

All children in whom animation is suspended in consequence of a too protracted passage from the womb to the outer world (whether from want of uterine exertion or insufficiency of room in the passage), may, in my opinion, be divided into two classes. The first is composed of those in whom the head suffers from a redundance of blood, and the second, of those in whom the head is deprived of its proper quantity. In the first class, the redundancy is generally met with in cases where the head presents naturally, but is born some time before the remainder of the body. At first it is of a natural color, but as the uterus continues to contract around the body, forcing it into as small a compass as possible, the blood is gradually driven more and more into the head, which becomes turgid, and when at last the body is expelled, we see the head often almost black, and the body perfectly white. In these cases, the escape of a teaspoonful or so of blood from the funis, before it is tied, as is generally

taught and known, aids us very much in our efforts for the child's recovery, which consist mainly of artificial respiration, the hot bath, cold sprinkling, and the application of other stimulants and irritants to the skin.

In the second class, and this it is with which we have more particularly to do, taking as before a typical case, the anæmic condition of the head, and consequently of the medulla oblongata, and that portion of the spinal cord from whence the cervical plexus is given off, is met with in footling and breech presentations, where the head and neck are born last, and the supply of blood through the funis is nearly or altogether stopped.

Supposing a considerable interval of time to have elapsed between the birth of the body and the expulsion of the head, we frequently find some such conditions as these: the body and the head pale, and apparently bloodless; not exactly the reverse of those we meet with in the first class, because, although in both cases that part of the child which is pressed upon by the maternal parts last is most emptied of blood, in the second class the absence of blood, caused by the pressure on the umbilical cord, prevents a too great congestion of any part of the child. We have then, a pale, flaccid body, scarcely any or perhaps no attempt at respiration, and a few pulsations of the heart in the minute, more or less irregular. We at once make use of one or other of the various methods of artificial respiration, not forgetting the hot bath. Time goes on, and beyond a greater regularity and frequency of the pulse, and a few attempts at respiration, and perhaps a mottled hue of the skin of the body, the head always remaining pale and death-like, we do not seem to have progressed very much. There seems to be no alternative but to go on, hoping the slight improvement will continue, and very often perseverance and skill do at last succeed in effecting a recovery.

Now I cannot see how we expect a "co-ordinate and adapted action of the muscles necessary to respiration," if they receive no nervous supply, nor can the medulla oblongata receive the impression of the necessity of breathing, and reflect it to the phrenic and other motor nerves, unless a due supply of blood be furnished to it. How then are we to get the blood where we want it? I answer, by inverting the child, and so forcing the blood by its own weight to the lowest part, that is, the head and neck.

About two years ago I was endeavoring to reanimate a child whose appearance and condition were just as I have described. More than half an hour had elapsed, and although the child showed no signs of a relapse, it made little if any progress. I took it carefully by the thighs, and held it upside down, gently swinging it backwards and forwards. In a few seconds I was pleased to see, that although before the whole body was pallid, now the head and back of the neck, which was in view, were becoming red and turgid, and almost directly afterwards, the child gasped violently, inspired, and gave as loud a cry as I ever heard from a new-born child. After ten seconds or so, I reverted it, when all respiration ceased, and the head became white. I then inverted it again, when the respiration and crying recommenced, and I allowed it to hang by its thighs for at least a minute, rubbing it well over the back of the head and neck, and pouring hot water over it. When the action of the lungs seemed to have fairly set in, I allowed it to lie on the nurse's lap with its head lower than its feet, and so it remained all night. The next day it was quite well.

Causes of Uterine Flexion and Version.

Professor Schrœder, of Erlangen (*All. Wein. M. Z.*, Oct. 8), quoted in the *Doctor*, observes that in the examination of women who have just given birth to a child, during the first week, the fundus uteri is generally bent forward. As involution proceeds the right position is gradually resumed. Retroflexion is more uncommon, and is generally of pathological significance. In deviation of the uterus, except after childbirth, which has a pathological significance, this is always accompanied by weakening of the ligaments. The importance of these for keeping up the normal position, and in causing change of position forward and backward, is only to be admitted in a small degree, and the uterus itself is in fault in most of the cases; the uterus is in no wise so fixed as is supposed. The so-called ligaments have no fixed points of attachment, and permit, even when not abnormally affected, notable mobility of the uterus. The most fixed of all are the origins of the broad and round ligaments, and the first indeed prevent notable dislocation to the side. The round ligaments also prevent, when normally tense, the falling back of the fundus uteri, but do not prevent its backward tendency when the organ is pulled or enlarged.

The vesico-uterine ligaments are of still less importance, and so are the recto-uterine, and these cannot prevent dislocation taking place. Thus, the uterine ligaments are entirely unfit to afford to the uterus a firm position in the pelvis, and just as little can the vagina fulfill the function.

The uterus can, according to this, make slight side deviations as well as notable ones, either forwards or backwards. The bands which fix the cervix have no influence either on flexion or on version; and, since they only reach as far as the internal os uteri, the body of the womb may bend at this point. The cause of the normal position of the uterus, hence, lies rather in its complete connection with neighboring organs. Every one admits that the uterus is to a certain extent anteflected and anteverted in the normal condition; it has a profile rather bent, and lies with an acute angle with the vagina. The dislocation is in some sort a physiological one. When does it become so marked as to be pathological?

We must, above all, come to an understanding as to what is to be described as version and flexion; the mixed form is far commonest in practice. Flexions are clinically of more importance than versions; but what is the border between physiological and pathological anteflexion? To fix this according to the greatness of the angle were a fruitless trouble. For, firstly, this angle, even in the same individual, is not constant, but to a certain extent depends on the congestion of the uterus, on the pressure of the abdominal viscera, and especially on the fullness of the bladder; and, again, the sufferings it entails are not dependent on the degree of flexion of the uterus. If we further inquire whether the flexion is pathological when accompanied by sterility, the affair is only more complicated. For we must remember that a woman may conceive whose sterility is caused by the narrowness of the cervix uteri without any treatment, since her sterility is in this case only relative.

We do best to speak of anteflexion of the uterus as soon as anything more than a slight bending is present over the anterior plane; and to look on this as pathological, when notable disturbance of the health is caused thereby, or sterility is the consequence. It is here to be remarked that retroflexions, which as a rule evoke more pressing symptoms, are more frequent. We notice as to the frequency of ante- and retroflexion a notable difference. In positions of high cultivated persons, where ladies allow examination without difficulty, and run off to specialists, anteflexions are most common; in the lower classes, where women seek for advice less for dysmenorrhœa or difficult micturition than for loss of blood, we find mostly retroversion present. Congenital anteflexion is characterized by the fact that occurs in women who have had no children, the uterus is of normal size and consistency, and the body and cervix stand in a constant angle to each other. However, we find not rarely in sterile women the anteflected uterus softened. The connection of anteflexion of the virgin uterus with enlargement and sensitiveness of the uterus causes dysmenorrhœa.

In the swollen uterus, even when it is congested, the angle generally disappears, and a pure anteversion appears. Such anteversions are very common in virgins. Another category of anteflexions takes place among women who have had many children, one after another. The canal of the uterus is enlarged, the cervix and body move as if on hinges. This takes place in sub-involution. We meet the second form chiefly in women of the working classes. Although anteflexion is so common, pure anteversion is very much the reverse. Its cause arises chiefly from thickening and swelling of the uterus. If the uterine tissue be softened, the physiological bending forward is increased.

Whilst deviation forward thus needs no explanation, retroversion always requires one. Adhesions or tumors may cause it, or the pressure of the abdominal viscera. We find retroversion most frequently in persons who have not given birth to children, or in women who have had children, and whose uterus is enlarged; as also frequently in the second or third month of pregnancy.

The Nature of Putrid Infection.

Prof. I. Ravitsch, of the Medico-Chirurgical Academy in St. Petersburg, published in the year 1870 a monograph upon the "Nature of Putrid Infection," which, during the present year, has appeared in the German language. He has made a long and laborious and most intelligent series of experiments upon rabbits, sheep, and dogs, injecting into the veins hypodermically various kinds of decomposing animal matter, and has carefully watched and recorded the symptoms resulting therefrom. He has satisfied himself that, in the vast majority of cases, putrid blood is the cause of putrid infection. He has, therefore, used for his injections putrid fluid blood, putrid blood dried and dissolved in water, and putrid blood evaporated to dryness by boiling, and then dissolved in water.

From this experiment he believes himself justified in deducing the following conclusions:

1. Putrid infection is not wholly occasioned by *living* microscopic organisms, existing in the putrid substance: although we have no right to reject, as entirely without influence, a possible indirect effect of these organisms in the production of the poison.

2. Under ordinary conditions these microscopic organisms cannot survive in the blood.

3. The effect produced by the putrid substance is in proportion to the quantity injected.

4. There is no period of incubation in the action of this substance agreeing in this particular with the action of other poisons.

5. The sole pathognomonic symptom of putrid infection is the rapid molecular disintegration of the tissues with which the poison comes in contact, as also of the solid constituents of the blood, of the muscular fibres of the heart, and of the cells of the liver, spleen, and kidneys.

6. Especially, where such molecular distintegration occurs, do the microscopic organisms appear. In these cases it may be asserted with certainty that "decomposition begets decomposition."

7. Elevation of temperature, nausea, diarrhœa, convulsions, ecchymotic spots upon the serous membranes, considerable hyperæmia of the intestinal mucous membrane, with hæmorrhage into the intestinal tubes, cannot be regarded as characteristic indications of the presence of putrid infection.

8. A constant (though not characteristic) appearance in putrid infection is, stasis of the entire venous circulation, especially observable in the abdominal veins. Whether this has its origin in a paralysis of the vaso-motor nerves, or in insufficient force of the heart's action,

resulting from the disintegration of its muscles, further experiments must decide.

9. Putrid infection cannot, like other infecting diseases, be produced by inoculation.

Galvanism in Genito-Urinary Diseases.

Dr. ROBERTS BARTHOLOW says, in a lecture reported in the *Clinic*:—The good effects of the galvanic current are very evident in some painful affections of the bladder; as, for example, reflex irritability of the organ. Irritability due to prostatic enlargement, or to disease of the mucous membrane, is increased by galvanism. The so-called "irritable testis" is generally cured by including the affected organ in the circuit and sending through it a weak continuous current. Galvanism is, however, more especially useful in atonic states of the sexual organs. It is very beneficial in that relaxed condition produced by spermatorrhœa. We use it in this disease to accomplish two objects: to relieve the hyperæsthesia of the prostatic portion of the urethra; and to increase the power of the erections. If the former be our object, an insulated urethral electrode connected with the negative pole is introduced, and the positive is applied to the spine or hypogastric region. A current from four to six elements of Siemens and Halske is sufficient for this purpose. If we wish to excite the erectile apparatus the current must be interrupted or the polarity frequently changed. I have myself not been fortunate in the relief of cases of true impotence by electricity in any of its forms. Especially has it failed in the case of men at the middle period of life, in whom the failure of sexual power is the outcome of excessive indulgence, lawful and unlawful.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——DR. HENRY MACCORMAC, of Dublin, has long earnestly advocated the theory that the chief, perhaps the sole cause of Consumption, is "the breath re-breathed." He has written a book to show the truth of this. And he now issues a little pamphlet, "A Word with Reviewers," scoring those who scored him, and complaining, with every appearance of justice, of the treatment he has received in several instances.

——The *Report on the Progress of Otology*, read before the American Otological Society at their annual meeting, last July, by Dr. CLARENCE J. BLAKE, is an able, lucid, and comprehensive essay, which ought to be in the hands of every surgeon interested in this specialty. It is neatly published in a pamphlet of 46 pages, and may be obtained, we presume, from the printers, Alfred Mudge & Son, No. 34 School Street, Boston, Mass.

——The searching examination of Prof. REESE'S review of the trial of Mrs. Wharton for the murder of General Ketchum, which appeared in the MEDICAL AND SURGICAL REPORTER, from the pen of Dr. PHILIP C. WILLIAMS, of Baltimore, has been republished in pamphlet form by Turnbull Bros., Medical Booksellers, Baltimore, Md. It forms a neat brochure of 31 pages, and as a specimen of trenchant and masterly scientific criticism, deserves a careful perusal by the profession.

BOOK NOTICES.

The End of the World. A Love Story. By EDWARD EGGLESTON. With 32 illustrations. New York: Craig, Judd & Co.

Mr. Eggleston has uncommon ability in portraying a certain low and naive phase of American life. We do not mean that he has no ability beyond this, but certainly in his last two novels he displays unusual tact in bringing forward the quaint and picturesque in the commonest events and personages of rude frontier life. The sketches with which this work is illustrated are telling and truthful, and add much to the genuine interest which attaches to the simple and pretty story.

Nebulæ, Comets, Meteoric Showers; and the Revelations of the Spectroscope regarding them. By Prof. H. SCHELLEN, and others. "Coral and Coral Islands." By Prof. J. D. DANA, of Yale College. Boston: Estes & Lauriat, 143 Washington street. Price 25 cents.

This is one of the Half-Hour Recreations in Popular Science, edited by Dana Estes. They are selected with great judgment, as not only written by the most eminent physicists of the day, but also in a style at once intelligible and entertaining to general readers. The present number contains the really wonderful results obtained by analysis of the light emitted by those enigmatic heavenly bodies, comets and asteroids. The material is drawn chiefly from Prof. Schellen's great work, and is authentic and well illustrated.

Prof. Dana's Essay on Coral Islands is a taking little sketch of those strange formations; and, though brief, gives a very complete account of the origin of the singularly shaped groups and reefs which stud the tropical seas. For sale by Alfred Martien, Philadelphia.

On the Treatment of Diseases of the Skin: with an Analysis of Eleven Thousand Consecutive Cases. By Dr. McCall Anderson. London, 1872. pp. 180. Macmillan & Co. Lindsay & Blakiston, Philadelphia. Price $1.75.

This volume is a marvel of good printing and sententiousness. Its author, a former pupil of Hebra, divides his work into two sections, the first classifying the large number of skin diseases with which he has had to deal in the Royal Infirmary, the Dispensary for Skin Diseases, and the Cutaneous wards of the University Hospital, Glasgow; and in his private practice. The second section is devoted to the therapeutics of the cases previously classified. The treatments discussed are largely those of the present day.

The writer does not believe in the danger of "driving in" a skin eruption. In Germany, especially Vienna, local treatment is principally relied upon. In England, it appears to the author that constitutional treatment is too exclusively resorted to. He believes that most of these affections are removed most readily and permanently by a mixed local and constitutional treatment.

A disease is often being treated constitutionally, when local remedies only are used, on account of their absorption. Most acute affections of the skin require soothing remedies; chronic cases will better bear stimulating applications. Sea-water or hard-water is apt to aggravate an existing skin inflammation. Hydropathic treatment is good for acute general psoriasis. Where itching is a marked feature of skin eruptions, leaving out of consideration parasitic diseases, the empyreumatic oils or their derivatives are useful. Chronic erythema, chronic eczema, prurigo, and psoriasis afford fields for their use. If too long continued they produce a mixed papular and pustular affection, called tar acne. Wood-tar, coal-tar, oil of cade (from Juniperus oxycedrus), oleum rusci (from bark of white birch), are the oils most commonly used. These oils are mixed up with benzoated lard, etc., and rubbed well into the affected parts twice daily.

Creasote, five grains to ounce of ointment, is used for allaying irritation of the skin. Carbolic acid is also used, rubbed up with glycerine, rectified spirit, and water. Potash applications are of use in the removal of abnormal products, as the scales of psoriasis, and in many cases they cure by their stimulating effect. Those which the author is in the habit of using are, potash soap (black soap, sapo-mollis), liquor potassæ, and solutions of potassa fusa, varying in strength from two grains to a drachm to the ounce of the excipient. Cases of tinea versicolor are cured by scrubbing the whole of the eruption night and morning, with black soap or its solution in spirit. The indiscriminate use of sulphur is condemned. Impermeable dressings, such as india-rubber gloves, do good in certain forms of eczema, psoriasis, etc.

Many cases of eczema are cured by the exclusive use of purgatives:—Sulphate of magnesia, three ounces; dilute sulphuric acid, an ounce and a half; sulphate of iron, three drachms; simple syrup, four ounces; tincture of ginger, one ounce; infusion of quassia to twenty-four ounces: a tablespoonful in a good deal of water, threetimes daily. Cod-liver oil is indicated in the treatment of skin diseases, although they are not strumous, provided they occur in strumous, half-starved, or broken-down subjects.

In the use of arsenic, puffiness of the face or irritation of the eyes, or such-like physiological effects, if slight in degree, should not lead us to discontinue the medicine; indeed, it is sometimes only then that its beneficial action on the disease is observed. Infants may be subjected to its influence by administering it to their nurses. It is contra-indicated in acute cases, where its use irritates, in digestive derangement, and in persons with bronchitis. It is especially valuable in psoriasis, pemphigus, lichen ruber, pityriasis rubra, and many cases of eczema. But want of space forbids further quotations from these interesting pages.

Notice to Authors.—A physician of liberal education will revise manuscripts, supervise the publication of books, prepare indices, etc. Address "Editor," care of J. W. Huff, Esq., 705 Jayne street, Philadelphia.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, NOV. 30, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE PHYSIOLOGICAL VALUE OF PHOSPHORUS.

We recollect reading in English history that when Charles II was in his last sickness, his physicians administered to him pills partly composed of powdered human skulls. Modern chemistry rescues us from the necessity of using the coarse and mixed forms in which elements appear in nature, and enables us to exhibit, when we wish to produce the effects desired by these old doctors, the substances they used in neater and less repugnant forms.

We naturally seek, however, those forms which are in their character most closely allied to that we would supply. In the essay to which the prize of the American Medical Association was this year awarded, and which we have already referred to in our review of the volume of *Transactions*, Dr. SAMUEL R. PERCY undertakes to accomplish this with reference to Phosphorus. His processes are in a high degree interesting, and we shall quote from his essay the portion describing the preparation he recommends for use in medicine. The formulæ are entirely his own, and have not been prepared by others:—

"Take of the purified cocoa butter, or of beef tallow prepared in the same manner, 1000 grains; put it into a Wolf's apparatus or a clean wide-mouthed eight ounce vial, to which a cork has been adjusted with two glass tubes, one passing to the bottom of the bottle, and the other terminating near the cork; add one hundred grains of Valentine's beef extract. Put on a water bath, and keep it for some time at 212° F., agitating frequently to mix the beef extract and fat well together. Add eleven grains of phosphorus in small pieces. When the phosphorus is all dissolved, attach an India rubber tube, connected with a reservoir of oxygen gas, under pressure, to the glass tube that leads to the bottom of the bottle. Allow the oxygen to pass slowly through the mass, still keeping it constantly agitated, and at 212° F. Continue this until all luminosity has ceased, and until all the smell of phosphorus has disappeared. Take it out of the water bath, allow the oxygen to pass slowly through it, occasionally agitating, until the fat begins to become solid: then cork tightly and leave for a few days. Heat again in a water bath, and if any luminosity is visible add pure oxygen. Take out the cork and glass tubes, and continue the heat till all the bubbles of oxygen are driven off. Pour into cakes to be made into pills, or pour into capsules, as described on page 50.

The formula just described is for the use of those who prefer to take medicine in the form of pills or capsules. For children, or for those who prefer medicine in a liquid form, or for use in combination with other medicines, I offer the following formula:—

Take of lard oil, purified in the manner before described, 1000 grains, Valentine's beef extract (which is more fluid than any other) one hundred grains; keep in a water bath at 110° F., agitating to mix the beef extract and the oil: add eleven grains of clear phosphorus in small pieces; when all dissolved, bring the temperature to 212° F., and strain; attach the bottle to the oxygen reservoir, and treat it exactly as described in the last formula.

In both of these formulæ, by the addition of the beef extract and the phosphorus to the fatty matter, the color is but little deepened; but on the introduction of the oxygen the color becomes quite brown, and when the process is completed the mass is of quite a dark color. This change is not affected by heat, as heat is used before the introduc-

tion of oxygen, but the change in color is owing to a change in the chemical formulæ of the ingredients. The oil is now entirely changed in character; it has lost its albaceous smell and disagreeable taste, it has become less poisonous, and is not luminous.

In the administration of phosphorus thus prepared, we supply a form of it closely corresponding to that which is found in the brain and nerves, and hence immediately assimilable.

The especial interest which this study of phosphorus as a medicine has, rests in its singular power as a nerve stimulant and producer of bone. The materialistic axiom of Moleschott, "without Phosphorus there is no Thought," has been made famous by Buchner. Certainly it has a powerful influence on the nervous system in all its manifestations.

Some other experiments, recorded in the *Aertzliches Intelligenzblatt*, for August last, by Dr. Giorg, illustrate its power in the growth of bone. According to him it results, from numerous experiments, that artistic fractures and resections carried out on animals which were being fed with phosphorus healed with a richer, thicker, and more solid callus. As to the explanation of the way in which phosphorus works, the taking in of a greater quantity of phosphoric salt and the over-production of bone is not of small account, since truly not bones but rather osteoid bone substance is stored up in great quantity when an increase in lime salt does not exist; and quantities of osteoid tissue appear when at the same time we remove all lime salts from the food of the animal. In experiments made in this way there was attained an extraordinary richness of fracture callus. It is also most interesting to notice that the mode of growth of the bones exhibits quite an identical alteration to that seen in rickets. This is a confirmation of the theory of this disease, according to which it is caused on the one side by want of inorganic salts in the blood, and on the other on a constitutional irritation working on the bone-forming tissues. It is just this last consideration which explains the working of phosphorus on the bones.

The author incites his readers to new researches and to therapeutic experiments on the use of phosphorus. In the last respect he believes that the exhibition of phosphorus is indicated in weakly development of the bony system, in fractures, and pseudarthrosis, in sub-periosteal resections, in transplantations of the periosteum, and above all, in osteo-malachia, for which phosphorus is a true antidote. For rickets, it would seem as if phosphorus should not be given on theoretical grounds, but he advises a trial of it to be made.

In these investigations the animals experimented upon were fed with pills containing 0.0015 grammes of phosphorus, which were gradually made up to contain double as much, or they were brought into a room full of phosphorus vapor. The result was that on all parts of the bones in which, in physiological conditions, spongy bone substance is made out of cartilage, a hard histologically well-formed mass is developed with Haversian canals, like the outer layer of bones. On going on for a long time with the injection of phosphorus, more compact substance continually was added, whilst the spongy tissue previously formed is absorbed as usual, so that in fine, compact substance alone exists.

These results render Dr. Percy's careful study of the drug peculiarly timely.

Notes and Comments.

The Boston Journal of Chemistry.

Among the sufferers by the great fire in Boston recently, was the *Journal of Chemistry*, one of our valued exchanges, which was burned out. The well-known energies of its proprietors, Jos. R. Nichols & Co., will not, however, allow that slight circumstance to interfere with its future usefulness. We rather expect in its next number to be treated with a chemical an-

alysis of its ashes. We had an analysis of its *paper* not long since; now for an analysis of paper and contents.

Sugar-Coated Pills.

We have received from Wm. R. Warner & Co., 154 North Third street, in this city, a neat mahogany case, filled with an extensive assortment of their sugar-coated pills and granules. These pills look tempting—children cry for them! We have not yet had an opportunity of personally testing their virtues; when we do, we will make a special report on them, if there is anything left of us! Till then we will "take them" on trust. See their advertisement.

Wm. A. Hamilton, 25 Norfolk Terrace, Bayswater, London, England, has issued a priced catalogue of an extensive assortment of second-hand books, ancient and modern, on science, history (including many works on American history), voyages, travels, etc., etc. These catalogues can be had at this office.

Vaccine Wanted.

We shall be very much indebted to our readers for some Vaccine Virus. We wish to distribute it to others. This we do gratuitously, whenever we have it to give.

Physicians' Fees.

We clip the following item from a newspaper:—

"Sir William Gull, the eminent London physician, who attended the Prince of Wales in his illness, went the other day to Cork, to see the Hon. R. R. Verney, lieutenant of the fifty-second regiment, ill with fever. The fee paid Sir William Gull for his attendance was four thousand dollars. It was a plain piece of gulling."

Why the sneer in the closing sentence? Sir William Gull added to an already exalted reputation by his eminent services in the case of the Prince of Wales, who was so ill last year, and why should he not be offered and receive a large fee from one able to pay, who desires his services? Distinguished lawyers receive extraordinary fees for extraordinary, yes, and even ordinary, services, and why should not physicians?

It is said that Sir Roundell Palmer's fee in the *unsuccessful* Alabama Claims case was £30,000 and a peerage, and what our lawyers received was more, probably, than many physicians receive in fees in their whole lives. Lawyers are well paid for their services to hospitals, why should not physicians be paid for theirs?

Correspondence.

The Placental Circulation.

Eds. Med. and Surg. Reporter:

As a matter of justice to me please give place in the Reporter to one single remark, to wit: that in the placental circulation "the blood flows *from* the placenta *to* the child, through the umbilical vein, and from the child to the placenta, by way of the umbilical arteries," is certainly a fact. I have never entertained the idea, nor have I at any time, any where, asserted that it flows in the opposite direction. The vein, under certain circumstances, *may* bleed after delivery, nevertheless.

Very Respectfully Yours,

A. F. A. King.

Washington, November 22, 1872.

News and Miscellany.

American Medical Association.

The volume of "Transactions" is ready. Postage 60 cents. All communications should be addressed to the Permanent Secretary, Dr. Wm. B. Atkinson, 1400 Pine street, Philadelphia.

Transactions of the Pennsylvania State Medical Society.

Copies of the last number may be obtained of the Secretary, Dr. Wm. B. Atkinson, 1400 Pine street, Philadelphia.

Death of Dr. Daremberg.

Dr. Daremberg, Professor of Medical History at the Faculty of Paris, is deceased. He was born at Dijon, April 14, 1817. Many works on the history of medicine are owing to his pen. He translated the works of Hippocrates, Oribasus, and Galen; edited the *Collectio Salernitana* (Naples, 1852–1854), and wrote many separate treatises, besides his great work, *Histoire des Sciences Medicales*. Last Spring he was ordered to give up all literary work, and he had made arrangements for the performance of his professional duties by deputy during the ensuing winter. For a time he appeared to improve, but the heart-disease from which he suffered was somewhat suddenly and unexpectedly aggravated during the last few weeks of his life, and during part of that time his sufferings were very great. He died on October 24th, at the comparatively early age of fifty-five, when his mental powers and activity were in full perfection, and just as a fresh field of influence and usefulness, and one to which he had long been aspiring, seemed to be opening before him. His private library was probably the best in existence on Medical history.

Death from Morphine.

The St. Louis *Globe* says: Dr. Everett, residing at No. 2408 Wash street, returned home from a visit at eleven o'clock on Sunday morning, and left his case of medicines and instruments on his office table in his residence. His only child, a daughter aged two years and four months, named Minnie, unobserved gained admittance to the office room.

In playing with the articles on the table she noticed the granules of morphine, and thinking they were candies, ate several of them, or about three grains in weight. As soon as the father returned to the room he instantly saw what had taken place, and summoned another physician. Both endeavored to save the child's life, but their efforts were of no avail, as it died eleven hours after taking the poison.

The Michigan Medical Society admits female practitioners to its membership.

NOTES AND QUERIES.

Mercurial Fumigation.

Dr. J. C. M.:—Your inquiry in regard to a convenient method of mercurial fumigation, suitable, as you say, for country practitioners, is best answered by describing a plan we ourselves have often adopted.

The patient, stripped quite naked, is seated on a cane-bottomed stool, and a large blanket is fastened around his neck, its folds enveloping him, stool and all. Underneath the stool a hot brick is placed upon a plate, and a scruple of calomel is then scattered over the brick. The mercury volatilizes, and in a few minutes the patient is in an atmosphere of mercurial vapor. To this he should be exposed 15 or 20 minutes.

Scarlet Fever and Measles.

Messrs. Editors:—Are there any well authenticated cases on record, where scarlet fever and measles, each type well marked, run a simultaneous course in the same patient? Is not such belief incompatible with all *taught* laws of disease? Please answer in the Reporter.

O. W. H——.

Edinboro, Pa.

Reply.—Such cases have been reported by most careful observers. There is nothing exclusive in the poisons. The hybrid is called by some "rubeola," and was first described by Dr. Patterson, of Leith, in 1810. See the Half-Yearly Compendium, July, 1872, page 200.

OBITUARY.

George Cochran, M. D.—Dr. George Cochran, the Health Officer of Brooklyn, died at his residence in Fulton street, opposite Johnson street, at 3 o'clock P. M., November 19th. Deceased was unmarried. His disease was congestion of the lungs.

Dr. Cochran was born in Kellybane, County of Londonderry, Ireland, in 1832, and was, consequently, forty years of age when he died. He has been well known in the medical profession for twenty years past. He was for eight years Police Surgeon under the Metropolitan Board, and subsequently Surgeon of the Brooklyn City Hospital. In May, 1870, he was appointed Health Officer, which position he still retained up to the time of his death. The flags on the city buildings were displayed at half-mast, in respect to the deceased official.

MARRIAGES.

Barrows—Odell.—Oct. 24, in the Brick Church, N. Y., by Rev. Dr. Murray, Arthur A. Barrows, M. D., and Edith, only daughter of Lyman Odell, all of New York City.

Case—Blanchard.—At the M. E. Church, Delphi, Ind., on Nov. 12, by the Rev. I. W. Joyce, Jennie A., eldest daughter of Dr. J. R. Blanchard, and John S. Case, Esq.

Downie—Hershey.—In this city, Nov. 21, in the Eighth Baptist Church, by the Rev. James Y. Mitchell, assisted by Rev. A. S. Patton, D. D., Rev. David Downie, pastor of the Baptist Church, Monroeville, Ohio, and Miss Annie S., daughter of the late Daniel Hershey, M. D. of this city.

Morrogh—Perry.—Nov. 19, 1872, at the residence of the bride's parents, at Stamford, Conn., by Rev. R. L. Burtsell, D. D., assisted by Rev. William P. Morrogh, D. D., Clifford Morrogh, M. D., of New Brunswick, N. J., and Cornelia, daughter of A. S. Perry, Esq.

Rauck—Smith.—In this city, Nov. 19, at the residence of David C. Smith, the bride's brother, by the Rev. William Major, John W. Rauck, M. D., of Philadelphia, and Mary A., daughter of the late John N. Smith, of Lebanon, Pa.

Smith—Banks.—On Nov. 18, at Brooklyn, by Rev. J. M. Buckley, Dr. Orsamus Smith, of New Orleans, and Louise, daughter of George Banks, of Patterson, N. Y.

Stewart—Allman.—In this city, Nov. 14, at the residence of the bride's parents, by Rev. Alexander Reed, D. D., assisted by Rev. John B. Dales, D. D., William S. Stewart, M. D., and Delia, daughter of Thomas Allman, all of this city.

DEATHS.

Downer.—At Lynchburg, Va., Nov. 15, Edwin Downer, M. D., late of Westfield, N. J., in the 31st year of his age.

Frisbie.—In Springfield, Nov. 14, 1872, of anæmia, Mrs. M. M. Frisbie, wife of Dr. C. W. Frisbie, of Fort Plain, N. Y., in the 31st year of her age.

Gardner.—In this city, Nov. 17, Emily Florence, infant daughter of Dr. Charles H. and Emily H. Gardner, aged 15 months.

Hardy.—The wife of Dr. Benjamin F. Hardy, a prominent physician of San Francisco, took chloroform Nov. 21st, to cure neuralgia, and died from the effects of the dose.

Mussey.—Nov. 4, near San Antonio, Texas, John Mussey, Esq., eldest son of the late Dr. R. D. Mussey, in the 59th year of his age.

Sterling.—Nov. 16, 1872, at Port Richmond, Staten Island, Margaret Kelso, wife of Dr. John W. Sterling, in the 72d year of her age.

Stevens.—In this city, Nov. 19, after a lingering illness, Caroline Hart, wife of Dr. A. H. Stevens, aged 61 years.

Upson.—In Bath, N. Y., Nov. 17, at the residence of his son-in-law, Rev. James M. Platt, Dr. Hiram Upson, formerly a physician in New York City, aged 69 years.

THE

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Original Department.

Communications.

MAN AND WIFE.

Read before the St. Joseph, Mo., Medical Society, Nov. 18th, 1872.

And Adam said "this is now bone of my bone, and flesh of my flesh: she shall be called woman, because she was taken out of man. Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be *one flesh*."—Genesis, chapter II.

A re-affirmation of this law is made by Jesus Christ in the nineteenth chapter of Matthew, the concluding line of the paragraph reading: "they are no more twain, but *one flesh*."

Now it is my purpose to undertake to establish, in this paper, the truth of the above scriptural assertion; in other words, I propose to demonstrate the fact that the declaration of the text, that man and woman become one flesh by marriage, should not be regarded in a figurative sense, but should be accepted as a literal fact.

As a basis for our argument we find it necessary to assume that the institution of the marriage custom was meant solely for the multiplication of the species; and that a partnership existing between a man and woman, which, in the language of custom and human law, constitutes them husband and wife, even where there is no *procreation*, does not fulfill the scriptural and scientific requirements essential to becoming *one flesh*. To state it more definitely, where there are no children as a result of the union of male and female in our system of marriage, the scriptural declaration of becoming *one flesh* is hardly probable; and, therefore, as to the spirit and intent of the scripture, the marriage is a fraud.

It is not probable that the idea of husband and wife becoming one flesh has ever been examined by the lights which modern science supplies us; and to this field of inquiry I shall therefore limit the remainder of this paper.

As a concomitant of the procreative function of man and wife, we will suppose that the domestic relations, as usually practiced among civilized nations, are observed; the parties must eat at the same table, sleep in the same bed, occupy the same room, etc., thus maintaining the closest relations possible; and probably for the fullest development of the principle, the wife, at least, should be youthful and healthy, and possess her nubile powers up to a complete standard of normality. She must not only be a wife, in the common acceptation of the term, but she must also be a *mother;* this is essential for the development of those cases sometimes noticed by each one of you, wherein there is a strong personal resemblance in both mental and physiognomic characteristics, and in tastes and habits, between husband and wife. I know it is the custom to invoke mental influences, brought to bear through association and example, to account for this phenomenon; but this is not a tenable theory, because we should then see it occurring between male and male, or female and female, whose associations had been long and intimate. It is not at all necessary to strain a far-fetched theory to meet and surmount the apparent difficulties

in solving this problem; nature's laws are simple, and when we truly interpret them they need no bending. An eminent authority has said that "to mingle friendships far is to mingle bloods," and in this fact lies the problem of man and wife becoming *one flesh*.

Physiological science teaches us that indelible impressions are made upon the physical life of the mother, by the father of her progeny; and that these impressions are sometimes transmitted by her to the children of her second husband, the children in this case, bearing a close resemblance to the first husband, though the two husbands may not only be no kin to each other, but the most remotely dissimilar in mind and person.

Now the question arises, are these characteristics of the progeny of the second husband acquired from an impression stored up from the first husband, merely in the generative system of the mother, or are they transmitted as actual, *general*, personal attributes of the mother at the time of conception and during gestation, attributes, therefore, essentially her own, and lasting as her body? We believe the latter hypothesis to be the true one, and are fully persuaded that in all cases where the offspring bears such marked resemblance to the former husband it will be found that the mother herself also possesses the resemblance in a very noticeable degree; and, further, if inquiry be made, it will probably be found that the children of the first husband are his prototype in both mental and physical formation, and that these traits were observable in them as far back toward intra-uterine life as it was possible to notice them.

You have, no doubt, anticipated in your thoughts the assertion next to follow, that it is through the sperm-cell of the father that the father's peculiarities are engrafted upon his progeny; and that through the instrumentality of the placenta an interchange of material occurs between mother and child; and this occurs, no doubt, from the moment of conception, the principles of the husband thus gaining access to the blood of the mother from the impregnation until the placenta is detached from the uterine surface. I am aware that some physiologists claim that perhaps the first husband's impressions are made through the semen upon the germ-cells of the mother whilst yet unerupted from their nidus in the substance of the ovaria, and that these germinal particles become erupted and vivified after the second marriage; this theory is hardly founded on good logic, because, if influenced by the sperm-cell at all, we find fecundation taking place, no difference in what situation the union of the two elements occur, be it the womb, fallopian tube, ovaria, or peritoneal cavity; the gestation proceeds.

It is our notion that it is through the placental circulation that, in the mean, the mother's blood becomes impregnated with elements which endow *her* first, and afterward her progeny by a second husband, with the characteristics of the first; and, though objections may be made that all the material received by the mother from the child in utero are in a retrograded condition, and, therefore, not fitted for the development of a high order of tissue in the mother, yet I have to answer that Dr. Carpenter himself suggests that it is through the medium of this very effete material treasured up in the mother that the second progeny acquire their characteristics. We go farther than he, and claim that this effete material is capable of a multiplication, either from repeated pregnancies or from regeneration in her own system, to an extent sufficient to change her physiognomy and even her mental qualities, thus veritably making her flesh of her husband's flesh. This, indeed, is but bearing out the type of her origin, for was she not made from man in the beginning?

As before suggested, it is not probable that mental conditions are at all directly concerned in these processes, but that positive material is the source of the interesting phenomena; mingling bloods is the secret of the whole process, and it occurs to me that were it possible to practice transfusion with untiring regularity and persistency, as is done by the fœtal heart, we might with the husband's blood produce an analogous condition in the mother's system. It is only through the blood that the wife can become "bone of my bone, and flesh of my flesh," and when she is supplied with my vital elements, she will become "flesh of my flesh" as surely as she will develop from any other pabulum. The foregoing hypothesis does not, however, exhaust the means by which husband and wife may become one flesh.

It is conceded by many of our best and most learned pathologists, that continued close personal contact, as in the case of two

persons who occupy the same room, the same bed, etc., and who consequently breathe and absorb the same atmospheric impurities, may one contaminate the other, and thus sow pathological seeds from an unsound to a healthy body, where they propagate themselves indefinitely. This is said to be the fact in relation to the germs of tubercle, and probably is so in all cases of constitutional diseases. It is not at all improbable that cancer, syphilis, etc., may also be transmitted in the same way under favorable conditions. Assuming, then, that these notions as to the propagation of pathological conditions are fixed upon a logical basis, it is but fair to assume that histogenetic elements may follow the same law, and that material given off from a healthy body may, under long-continued and favorable conditions, affect the body of the young and impressible to a degree sufficient to be noticeable.

Is it then sufficient to excite deep surprise and be classed among the marvelous, that when we find all the agencies spoken of acting together upon the body of a young and impressible child-wife, in after years we find her actually taking on her husband's physiognomic expression, thinking like him, acting like him, and producing children like him? Indeed, I am of the opinion that these are but the logical sequences of a plain unambiguous antecedent, easily connected as cause and effect, thus bringing science to the vindication of the Scriptures, and giving you assurance that, if you have never known it before, you and your wife are *really one flesh.*

DISCUSSION.

In the remarks upon this paper Dr. J. B. Luelson objected to its reception, upon the plea that the society had a by-law excluding all matter touching upon religion and politics. Dr. Catlett could see no grounds for its exclusion on that score, and thought the subject one of deep interest to the scientist and to society in its medico-legal aspect; he thought, however, that the impressions made upon the mother and offspring by the father, were made, not directly through the blood, but by impression upon the molecular elements of the nervous system; therefore the phenomenon is a nervous one.

Dr. Heddens thought that the mental and physiognomic similarity observable in man and wife are due to the law of "mind over matter," or in other words to mental influences, association, etc., and instanced the same thing as occurring in all members of a community which was isolated and subject to the same mental and physical surroundings for each of its members. He also took the ground that the theory in the paper making man and wife one flesh, was only half finished, as it made the wife one flesh with the husband, but did not make the husband one flesh with the wife. (The doctor forgot how God did it.)

Dr. Davis brought down the inexorable logic to sustain the position of the paper, that it is not through a nervous agency that the mother propagates the first husband's influences to the children of a second husband, but only through the blood, because if the former was a fact we would see it happening in cases where a woman had been for years fondly attached to a husband, but who had begotten no children for her, and who then dies leaving her to bear children by a second husband; the children in this instance never having been known to resemble the former husband. The genial doctor made this fine defence of the paper, too, in the very face of the assertion that he who had not procreated the species, and yet was married, committed a scientific and scriptural fraud. The doctor, though devoid of the cares and expense of a domesticated progeny, asserted, at the commencement of his able discourse, that he *had seen* "bone of his bone and flesh of his flesh," notwithstanding the broad smiles which overspread the visages of gentlemen around him. Dr. Atchison thought that the genesis of like in man and wife, where it occurred, ran back to cellular existence, and that the scriptural assertion of man and wife becoming one flesh only had allusion to a union of the elements of the two beings in their progeny. (He had also forgotten that Adam claimed the woman as flesh of his flesh long before the birth of Cain.) The same idea was entertained as to the scriptural meaning of the assertion by other members, an idea which again left Dr. Davis without a legal marriage certificate.

Dr. Brock wished to know if the babe who is put out by its mother becomes bone and flesh of the wet nurse who nourishes it? The member to whom the question was addressed was not prepared to discuss a subject so profound. In justice to Dr. Luelson, it is right to explain that he only made the

suggestion as to the inappropriateness of the subject upon which the paper was based in a spirit of levity.

INJURIOUS EFFECT OF CARBOLIC ACID FROM INJUDICIOUS LOCAL APPLICATION.

By John S. Hughson,
Of Sumter, S. C.

Never having seen any notice in regard to the injurious effect of carbolic acid when locally applied by the unprofessional, and consequently ignorant, as regards the poisonous effects of this article, I transcribe the following from my note-book, as it may, perhaps, not be altogether void of interest.

August 27, 1872. Called out this 9 o'clock P. M., to see a young gentleman who had noticed yesterday morning a discharge from the urethra, and having heard that carbolic acid was used in gonorrhœa, he concluded to test its value; accordingly he purchased one-half ounce of the saturated solution and attempted to inject about one drachm within the urethra. The first few drops caused such intense pain that he jerked the syringe from the urethra, and its contents were spilled upon the prepuce and under the skin of the penis.

When I saw it, some thirty minutes after, it was enormously swollen, and presented very much the appearance of phimosis.

The parts were totally insensible, there being no pain except within the urethral canal. Ordered cold water to be kept constantly applied, and directed

℞—Olive oil, fʒiv.
Laudanum, fʒss. M.

Sig.—Inject immediately, at midnight, and in the morning, using one-third at each injection.

28th. Patient called at my office. The swelling of penis greatly reduced; can retract the prepuce entirely over the glans; the parts have a dull, whitish look; no pain. Continue the cold external application, and inject cold water frequently during the day.

29th. Sent for this morning hurriedly. Arriving at the house found the patient suffering intense pain from paraphimosis. He had retracted the prepuce for the purpose of washing the penis, and could not return it. Glans swollen and tender. Used the following:—

℞—Acet. plumbi, ℥j.
Aquæ, ℥viij. M.

Applied soft cloths saturated with the solution to the glans for ten or fifteen minutes; then attempted and succeeded by manipulation, in restoring the parts to their natural position. The effects of the caustic were well marked by numerous raw surfaces on the inner part of the prepuce, and in streaks (as of a liquid running in a stream) upon the glans. Discharge during the night from the urethra, none this morning. Ordered cold application continued to the entire penis, and apply once every three hours to the raw surfaces with a camel's hair pencil, the following liniment, viz:—

℞—Linseed oil.
Lime water, aa ℥j. M.

Being in pain, gave fifteen drops of laudanum. Directed the patient to draw the prepuce back every two or three hours sufficiently to expose the glans, but *not entirely* over the corona glandis; I desired this retraction of the prepuce in order to guard against phimosis, which I still feared might take place.

30th. Appearance of parts improved; but it paining him to retract the prepuce as directed, he had neglected or rather refrained from doing so. Phimosis strongly threatened. Omit the cold water, continue the liniment, and draw upon the skin *so as to expose the glans*, and thus prevent adhesions between the abraded surfaces in apposition, and consequent adherent phimosis. There is little gonorrhœal discharge; considerable pain in urinating. Prescribed as follows:—

℞—Carb. potass., ʒj.
Bro. potass., ʒij.
Aquæ distil., ℥ij. S.

Sig.—One teaspoonful three times a day.

31st. Having neglected the direction to retract the prepuce, giving as the reason that it *pained* him, which, of course, was to be expected, the grayish appearance of the skin having given away to raw surfaces, I find, as I feared, that there is a decided case of phimosis. Ordered a hot bath to be taken every three or four hours, and warm poultices constantly applied to the part. The pain, on micturition, is very severe. Ordered injection, just *before* urinating, of the linimentum calcis, with one-eighth grain of morphine in solution to be added.

Sept. 1st. No prospect of removing the phimosis without an operation, but as the penis is still very sore from the effects of the carbolic acid, think best to await its further improvement; 'tis doing well, and looks

much better; pain still severe on micturition, although the injection was of some benefit; directed now the injection to be used *immediately after* (instead of before) urinating, and inject cold water under the prepuce every hour or two. Urethral discharge has increased. Ordered:—

℞—Bals. copaiva.
Sweet spirits nitre.
Paregoric, aa f℥j.
Tinct. veratrum viride, f℥ss. M.

Sig.—One teaspoonful four times a day.

The parts continued to present an improved appearance, pain upon urinating considerably less, discharge from urethra almost entirely ceased, when, on the 6th of September, I operated. Having obtained from a mixture of chloroform, sulphuric ether, and alcohol (recommended by a correspondent of your journal), complete anæsthesia, I clipped off, with the scissors, about one-fourth inch of the prepuce, extending over the glans, then, with the aid of the director and scalpel, slit up the prepuce near the frænum, thus permitting the glans to be entirely exposed to view. Upon recovering from the effects of chloroform he was very nervous and pulse quite weak; gave brandy with one-eighth grain morphine, producing reaction and quiet; ordered cold water dressing to parts.

On the 8th doing well, suppuration setting in; directed

℞—Carbolic acid crystals, ℥j.
Water, Oj. S.

Sig.—One wineglassful of this solution to be added to eight of cold water, and the part kept constantly wet with it.

Improved daily, and on 1st of October was entirely well, with very little deformity of the organ, the glans being entirely covered by the prepuce; in fact, without the penis was raised up from its natural position nothing abnormal would be at all noticed.

I have been surprised to find nothing said on the treatment, or even in regard to the injurious local effect of carbolic acid when wrongfully used. Dr. Bill has an admirable treatise on "Carbolic Acid and its *Uses*" (*American Journal of the Medical Sciences*, July, 1872), and I have no doubt that many, with myself, would be glad to have the benefit of the experience of those who have had abundant opportunities in practicing upon its *abuses*.

I have thus referred particularly to the operation for phimosis, in order to direct the attention of those who are in the habit of dividing the prepuce *in front* to this method of operating, that is, close by the side of the frænum. 'Tis seldom that a ligature is required to arrest the hemorrhage, as a suture may be passed on each side of the wound to connect the integument and mucous membrane, and thus obtain a more rapid recovery; there is very little apparent deformity following this operation.

Some eminent surgeons recommend this as the best for the patient, with but little more trouble to the operator.

NOTE.—Since the above was written I see in the REPORTER (Sept. 28th) an extract from the *Bulletin de Therapeutique*, citing cases of "Dry Gangrene following the use of Carbolic Acid." We learn that, though an article of excellent properties when judiciously employed, 'tis also a potent one for evil in the hands of the unskilled.

TEACHING THE DEAF AND DUMB TO SPEAK.

By LAURENCE TURNBULL, M. D.

Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

Continued from page 471.

Before commencing to teach a class of deaf mutes in articulation, each one should be carefully examined by the physician of the institution, both the external and middle portions of the ear, by means of the aural speculum, with bright light. Also auscultation of the middle and internal ear by the double stethoscope. Rhinoscopy should also be employed; which is the inspection of the posterior region of the nares by reflected light. A mouth mirror is to be placed beneath and behind the soft palate and uvula, with its reflectory surface looking upwards and forwards, so as to inspect the posterior opening of the nasal passage, Eustachian tube, etc. This same apparatus can be employed to examine the throat by means of an image of the parts reflected upon a small mirror placed within the pharynx, with its reflecting surface turned downwards, the ray of light being received on the mirror from the sun or artificial light. To examine the anterior portion of the nose, a bright reflected light is required, and Kramer's bivalve ear speculum answers the purpose very well. A careful certificate should then be made out, of the condition of the parts, and each case should be numbered in the order in which it is found; also the mental condition,

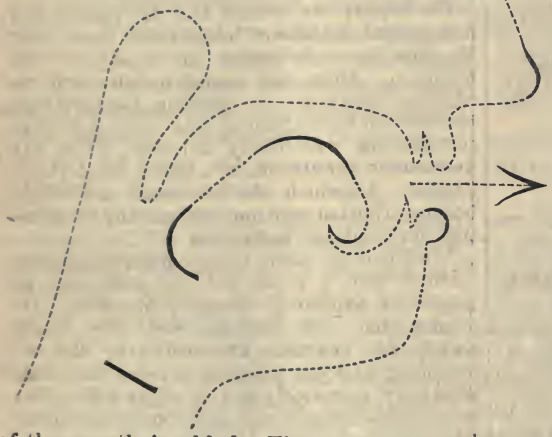
or fitness to undergo the brain labor necessary to acquire the English language in all its fullness. In this way it would save the teacher the unpleasant duty of attempting to teach the pupil for a time, and then informing him that he was defective, and unable to go on with this form of study. A painful instance of this kind we recently noticed on a visit to one of our institutions.

Mode of Communicating Visible Speech to Deaf Mutes.

The elementary symbols are pictorial of parts of the mouth, and of their modes of action. As the various organs of speech are disposed in forming any particular sound, the corresponding symbols are put together to build up a compound character indicative of the position of the mouth. This compound character most truly represents the sound intended, because no person can put his mouth into the position indicated without producing it.

The symbols have to be successfully explained to deaf mutes in the following manner: The outline of a face turned toward the right is drawn upon the blackboard (see Fig. 1), and a representation of the inside

Fig. 1



of the mouth is added. The pupil's attention is directed to the various parts of the diagram, and he shows his appreciation by touching the corresponding portions of his own face or mouth. When the teacher points to the arrow-head, a motion of the hand is made to suggest that it means "air coming out of the mouth."

Those portions of the face represented in the illustration by dotted lines are then erased from the board, and attention is directed to the broken remains of the diagram. When the teacher points to the fragmentary nose, lip, or tongue, etc., the pupil touches his own nose, lip, or tongue.

It will be observed that these disjointed portions of the diagram are *the Visible Speech symbols for the corresponding parts of the mouth.* The symbol for "lip" is the outline of a lip; that for the point of the tongue its picture, and so with other parts.

The sign for the lip is used for every sound formed by the lips; so with the point of the tongue, the top or "front" of the tongue, and the back of the tongue.

The sign for the throat represents a mere chink or slit in the throat, and is pictorial of the vocalizing condition of the glottis. It therefore means "voice."

The sign for the nose is, in reality, pictorial of the uvula, the pendulous extremity of the soft palate. When the soft palate is depressed, the breath passes up behind it and escapes through the nostrils. When it is raised, the communication between nose and mouth is cut off. Hence the application of a symbol originally pictorial of the soft palate to the nose. It means "air passing through the nostrils."

But to return to our pupil. He knows nothing of the deep meaning underlying these symbols. To him the strange lines upon the board are only the remains of a picture. Filling up the gaps, in imagination he recognizes the crooked line as a portion of the nose, the curves as so many parts of the mouth, and the straight line as the throat.

The next step is to isolate the symbols, so that our deaf-mute shall recognize them independently of their position in the diagram. They are accordingly written in one line below the fragmentary picture.

The crooked character is shown, by reference to the face above, to be the same as the nose; the straight line, the throat; and the curves, the various parts of the mouth.

The elementary forms are then built up into more complex shapes.

The second line illustrates the junction of the curves with the straight line.

In the first symbol the curve is seen to be the under lip, and the straight line the

throat. The name of the symbol is "lip-voice." The child describes it by pointing to his lip and then to his throat.

The third line shows the union of the nose sign with the various curves; and the fourth exhibits a triple combination, viz: a part of the mouth, with nose and voice signs added.

A character indicating a peculiar position of the vocal organs is next introduced. Observe the first symbol in the fifth line. The space enclosed by the curve is symbolically *shut in* by a line drawn across the ends.

Thus a straight line (made thin to distinguish it from "voice") is called "shut." The idea is conveyed by forcibly closing a book before the eyes of the pupil. Whenever he names the sign he imitates this motion.

The fifth line exhibits the union of this symbol with the various curves. The first character in the line, named "lip-shut," is described by touching the under lip, and then imitating with the hands the closing of a book. Here, for the first time, the idea of the directive nature of the symbols begins to dawn upon the deaf-mute. In conducting classes I have invariably found that when this point has been reached, at least one of the pupils would illustrate the symbol by *shutting his lips*.

The characters in the sixth line are composed of a curve and the signs "shut, voice."

Those in the seventh contain a curve and "shut, nose;" and the symbols in the eighth line are analyzed into a curve and "shut, voice, nose."

(To be Continued.)

Medical Societies.

CINCINNATI ACADEMY OF MEDICINE, NOVEMBER 9th, 1872.

(Reported by J. W. Hadlock, M.D.

Two Cases of Placenta Prævia.

By C. D. Palmer, M.D.

These two cases of *Placenta Prævia* have come under my observation, quite recently. To the first I was called in consultation about 8 A.M.; the woman, a multipara, had been in labor part of the previous P.M. and night, during which her physician had been with her. He had diagnosticated the position of the placenta, and succeeding in arresting the hemorrhage in part, with the tampon and hand.

When I saw her she was much exhausted, but not pulseless, and not in a critical condition, although she had lost much blood. The os was well dilated; the membranes ruptured; the child dead, as proven by an examination. The placenta was centrally attached so far as being over the whole os was concerned, but its attachment had extended upwardly more to the right than to the left. By uterine action, the lesser lateral attachment had become detached and was hanging partly loose within the cervix and vagina.

The propriety of immediately and entirely separating and removing the placenta was quickly determined upon, since the child, as stated, was dead. This was easily done, when the fœtal head slightly descended and the hemorrhage ceased. Fearing that the patient was too much exhausted to deliver herself, and also that the hemorrhage might even in a measure return, it was determined to deliver artificially the child. The long forceps were applied obliquely over the head, L. O. A.—unengaged and above the brim, the head rotating within the blades in the pelvis. The mother made a speedy, uninterrupted, and complete recovery.

The second case I saw in consultation, not long after, in same neighborhood, with one of two physicians present in Case I. This was Oct. 22. The patient was a multipara, aet 42. The attending physician was summoned in haste not more than a half hour prior to my arrival, on account of the occurrence of sudden and most profuse hemorrhage. During *this* time he was attempting to arrest the flow, the bed already flooded, by a steady pressure of his hand against the placenta and cervix.

On inquiry, we learned that the patient had had several attacks of hemorrhage since July 15, the first following an injury to the abdomen. These had ceased by quiet and recumbent position. In addition, the two past months had been attended with much suffering, so that she was nearly helpless. The day previous to our attendance a severe hemorrhage occurred, for which she had called in a neighboring physician, who had, without any examination, directed rest and opium.

We found our patient very much exhausted, restless, with a pulse 140 and over, and as might be expected, extremely bloodless. On examination, the placenta was very large, readily felt centrally attached over the os, extending an equal distance in every direction, anteriorly, posteriorly and to either side. The os was two-thirds dilated and somewhat dilatable.

No motion of the fœtus could be detected; no sound of the fœtal heart heard. The child seemed dead. This opinion was subsequently confirmed by noticing the absence of pulsation in the cord and artificial rupturing of the membranes.

It appeared here, too, as if the placenta, according to *Simpson's* method, might be entirely removed; but recognizing again its large size, the considerable amount of remain-

ing attachment, and the almost necessary consequences of additional hemorrhage by such manipulation, it was concluded to detach only a lower segment of it, as Barnes recommends, with the finger, so as to loosen up the cervix and then go through the mass, rupture the membranes and draw off the liquor amnii. This accomplished, the pulseless cord descended, the head also slightly. The hemorrhage now apparently ceased; still our patient was sinking, although we had commenced stimulation.

Our judgment now decided against waiting for nature's effort to terminate delivery. Safety seemed dependent upon a speedy emptying of the uterus.

I thought, on examination, I might deliver the child with the long forceps, although the head was high, loose in the uterine cavity, the anterior fontanelle presenting and the occiput to the left. In this I failed, one attempt being made. Podalic version was then attempted, the pubic foot brought down (the pelvis of fœtus being used as wedge to os uteri), then the sacral foot. Some delay was experienced on account of the hands and arms of the fœtus being thrown up alongside of its head, and the subsequent delay of the head, necessitating the bringing down first of the sacral arm, and then the pubic, and finally the use of the forceps.

Placenta delivered at once entire. Uterus perfectly contracting. Stimulants and ergot were administered, as comfortable position as possible given, with the head placed lower than the pelvis, and the bandage applied.

The vulval napkins were carefully and frequently watched. So was the condition of tonic and clonic contractions of the uterus. Certainly not to exceed two ounces of blood were lost post-partum.

For more than an hour following delivery she rallied, but after that time vomited, became more restless and began to fail. The uterus became larger, but not more so than is usual a few hours after delivery.

We decided, under the circumstances, that to completely check the post-partum flow might enable the patient to rally and turn the balance in her favor. Every drop of blood was to be saved. Accordingly the per-sulphate of iron uterine injection was given. It proved of no avail, however, in so far as the general condition was concerned, for she died in about thirty minutes afterwards, some two hours and a-half after delivery.

Remarks. I have reflected not inconsiderably on this case, and have repeatedly asked myself whether a different termination under different management could have been secured. As to the child, it was evidently dead before either of us saw the case. The indications were strong to speedily accomplish delivery. Death seemed inevitable to her *undelivered;* but through delivery, by completely removing the causes of hemorrhage, the best means were taken to save life. That a very nice point for prompt and decisive action presents itself at times, every obstetrician must have felt. The child living, the necessity for turning under circumstances favorable is greatest; but if dead, the placenta previously or not delivered, or partially detached after the methods of *Barnes* or *Cohen*, and the hemorrhage apparently checked, each physician must determine for himself upon the *choice* of turning, with its risks of *shock*, inducing additional exhaustion, and *waiting* for reaction with risks of returning hemorrhage and the losing of the patient undelivered.

No dogmatic or arbitrary mode of procedure can be laid down for guide in all cases; each affording its own special determining circumstances. Had this patient been my own during the attacks of hemorrhage prior to labor, I should have very seriously entertained the propriety of the induction of premature labor.

Editorial Department.

Periscope.

The Proper Steps for Physicians in Suits for Malpractice.

The following advice is given by Dr. B. Mattocks, of St. Paul, in the *Northwestern Medical Journal*:—

Having now discussed briefly the law of malpractice, we think it would be well to turn our attention to the privileges and duties of the unfortunate doctor who becomes entangled in a suit. In the first place, the surgeon, instead of spending the best of his time in vehement vituperation against "ungrateful patients," "rascally lawyers," and "contemptible practitioners," should select one or more *good* lawyers, and go to work, for a malpractice suit "means business." Many suits are lost by the medical profession because the surgeon, "strong in the right," and depending on his friends, does not bestir himself. As a rule the lawyer for the plaintiff works for spoil, and he works hard. The reputation of the surgeon is at stake, and he should leave no stone unturned, not only to gain his case but to *do it triumphantly.*

2d. Having secured first-class counsel, the surgeon must now see that his counsel is well versed *on the anatomy of the case*, for without this knowledge on the part of the attorney he cannot successfully defend the case. We were

once asked by an attorney who was prosecuting a case involving a fracture of the thigh, during the trial, if there were not two bones in the thigh; it is needless to add that he was badly beaten by an opponent who had the anatomy and pathology of the case at his tongue's end.

3d. As we have before stated, juries *are partial to print.* It is therefore better to have six recorded cases similar to the one under trial than the testimony of six experts. Judges and juries want precedents, and lawyers dread them.

4th. Secure good witnesses as experts, and secure each with an object in view. Do not tire your witness by telling him about your case and trying to work upon his sympathy, but question him and see if he can be of any assistance to you by his experience or knowledge, and have your attorney examine him previously. We have seen sad mishaps occur by getting the wrong man in the witness box; above all things get a *truthful, honest witness.* It will not help your case to lie about it. See that your witness understands the *theory of the case.* Above all things never call an ignorant man to testify for you, though he may be ever so celebrated.

5th. Comprehend your own case in all of its bearings; understand thoroughly its literature so that you can instruct your attorneys; trust neither to luck nor favor; do not get angry or excited, then even with a bad looking case, if you are in the right, you will be pretty sure to come out victorious.

The Heaviest Brain on Record.

Dr. James Morris, of London, reports the following case in the *British Medical Journal*:

On October 3d, 1849, there was admitted into University College Hospital James Hursey, aged 38, bricklayer, a robust-looking man. Ruptured seventeen years before; he had left off his truss for two or three years; now the rupture was down and could not be returned. It was right inguinal, small and tense, with no impulse on coughing. In the evening Mr. Arnott operated. The sac was opened; much serum, tinged with blood, ran from the abdomen; the omentum was adherent to the sac; the constricted bowel, of a dark mahogany color but shining surface, was returned. He did well at first, but died two days later. Erysipelas and pyæmia at that time prevailed in the hospital. Of ten successive cases of strangulated hernia operated on by several different operators, and treated afterwards on the most diverse principles, only one survived. In that case (Mr. Marshall's) the sac was not opened.

The *post mortem* examination of Hursey disclosed peritonitis, a serous cyst in the liver, some damage to the kidneys, old pleuritic adhesions of the right side, recent lobular pneumonia (result of pyæmia), and some hypertrophy of the left ventricle of the heart. The weight of the brain, taken immediately on removal, exceeded sixty-seven ounces. This weighing was most carefully made, and was witnessed by several students. The brain was well proportioned; the convolutions were not flattened; though the surface was fairly moist, it only lost about one ounce weight after the usual dissection and draining for two hours. The specific gravity was not taken. The cerebellum and pons were separately weighed; of these I have not the figures, but there is no reason to suppose that they were disproportioned to the rest of the brain, as in the cholera case recorded by Dr. Parkes.

Hursey's height was five feet nine inches and a half. There was the utmost difficulty in obtaining a satisfactory history of him. His wife and his landlady gave different accounts. It seemed that he was a native of Sussex (Dr. Parkes' case was an Irishman), and had left his village and changed his name on account of some poaching troubles; that he was not very sober, had a good memory, and was fond of politics. He could neither read nor write.

Albinism and the Marriage of Cousins.

G. Arcoleo (*Centralblatt*, No. 28) has made some remarkable observations on the occurrence of albinism in certain towns of Sicily. In a population of 255,000, living in five towns, were 62 albinoes, or 1 in 4000; 24 of these were not living at the time of making the observations. Of the whole number, 34 were males, 28 females. They were members of twenty-four families, but in only three of these were all the children albinoes. In one case, a pair of twins was observed, one normal, the other an albino. Six of these persons were married, and all but one had children, none of whom showed the least albinotic taint; nor was there any history of this defect in the parents or remoter ancestors. In several cases, it was noticed that, while the one parent of an albino was blonde, the other might be dark. While, therefore, inheritance had plainly nothing to do with this peculiar condition, the writer thought he found strong support for the theory which connects albinism with consanguineous marriages. Other supposed causes, such as climate, privations, etc., were plainly without influence. On the other hand, in five of the twenty-four families, the parents were related in the second degree (? cousins); and some other consanguineous marriages had been contracted in previous generations. Although, in the other cases, no such relationship could be traced, the social and political conditions of Sicily were thought to make it probable that such relationships might exist, though unsuspected by those concerned. The insular position, the want of intercommunication between different parts of the island itself, the jealousy and repugnance shown by the Sicilians themselves towards foreigners, are all conditions which must cause considerable intercrossing of the same elements. For instance, one of the families containing albinoes was that of a fisherman in Palermo,

one of a race of people who are confined to one quarter of the town, and notoriously marry only among themselves. Moreover, other diseases, supposed to be connected with consanguineous marriages, are, as a matter of fact, particularly common in Sicily, *e.g*, deaf-mutism, rickets, idiocy, and epilepsy. In support of the theory, it is also urged that albinism very frequently occurs in the oases of the African coast, where there must be the same isolated condition of the population as in an island.

Sulphuric Acid in Caries.

At the Clinical Society of London recently, Mr. WARRINGTON HAWARD exhibited a case of caries of the knee-joint, treated by the local application of sulphuric acid. A boy, eight years of age, had suffered for eighteen months from progressive disease of the knee-joint. He was much emaciated, pale, and very weak; took food ill, and was in much pain from frequent startings of the joint; there was considerable fever, and he had a wearied and anxious expression. The right knee joint was much swollen, and discharged, from openings on each side, a large quantity of foul pus; matter had also burrowed in the neighborhood, and sinuses discharged both above and below the joint. He was placed under ether, and the joint examined with the finger. The ligaments were found quite dislodged, allowing free lateral movement; the cartilages were destroyed over a great part of both articular surfaces; and the joint-ends, with numerous carious patches, were surrounded by the thickened and suppurating synovial membrane. The ends of the tibia and femur were not expanded, and the disease was limited to the joint. Sulphuric acid was freely applied, after the manner introduced by Mr. Pollock, to the carious joint-surfaces, and, of course, necessarily to the synovial membrane. The result of this was the separation of parchment-like sloughs from the bone, the rapid diminution of suppuration and pain, the healing of the sinuses, and a corresponding improvement in health. In two months the sinuses were nearly all healed; and, in six months, there was ankylosis of the bones. The boy is now in excellent health, and walks about actively with a firm and useful limb. This is the first case in which this treatment has been applied to a large joint; but one was mentioned in which Mr. Pollock had thus treated the wrist-joint. It was pointed out that the cases to which this treatment was especially applicable were those which have their origin in chronic synovitis, and which go on to ulceration of the cartilages and superficial bone-caries, in which the acid acted beneficially, not only upon the bone, but by destroying the thickened and suppurating synovial membrane. Dr. Theodore Williams wished to know of what strength the acid was. Mr. John Croft said that he had used it in two cases, one of diseased cranial bone, and the other tarsal bone. Both were successful. Mr. Lawson referred to the success of Mr. Pollock's cases, in which he had used the application diluted fifty per cent., but afterwards the pure acid. He said that Mr. Fitzpatrick had recommended and had used Vienna paste in caries. Hydrochloric acid had also been employed with great benefit. It seemed, he thought, only necessary to apply some strong escharotic. Mr. Berkeley Hill said he had used Ricord's paste with charcoal in necrosed tibia. The bone came away, and granulations sprang up, and thereby the process became shortened.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

Messrs. Claxton, Remsen & Haffelfinger, of this city, have reprinted from the second volume of St. Thomas' *Hospital Reports*, Dr. LIEBREICH'S instructive essay *On a New Method for Extraction of Cataract*. It forms a neat 12mo pamphlet of 20 pages, illustrated.

JOHN DARBY, author of *Odd Hours of a Physician*, is writing a new book on Thinkers and Thinking. The author, in his real name, is associated with some of the most valuable contributions to surgical literature which have appeared of late years, and is himself one of Philadelphia's most eminent surgeons.

L'Instinct, ses rapports avec la vie et avec l'intelligence, by HENRY JOLLY, a work crowned by the French Academy, has just appeared in a second revised and enlarged edition.

Dr. DAWSON TURNER, the head master of the Royal Institution School, Liverpool, has thrown into a manageable and convenient form his excellent *Rules of Simple Hygiene*, and they form a very simple, clear, and useful body of directions.

The *Gazette Obstetricale* is the title of a new journal, edited by Dr. VERRIER, which has just been issued in Paais, and is to be published semi-monthly.

E. STEIGER, N. Y., has received and offers a limited number of copies of the *Catalogue d'une collection de livres, gravures, peintures, assemblee par M. H. J. Broers, docteur en medicine a Utrecht.* The catalogue is a large 12mo, of 150 pages, one-third of which are

devoted to the medical sciences. This valuable collection will be sold at auction, by J. L. Beyers, at Utrecht, March 8, 1873, and subsequent days.

BOOK NOTICES.

Autumnal Catarrh (Hay Fever), with Three Maps. By Morrill Wyman, M. D., late Hersey Professor adjunct of the Theory and Practice of Medicine, in Harvard University. New York, Hurd & Houghton, 1872. 1 vol., 8vo. cloth. pp. 173.

This interesting treatise by Dr. Wyman deserves to be carefully read. Although the first that has ever appeared devoted to the topic, we are sure the disease is by no means so rare, at least in the Middle Atlantic States, as to justify such neglect of it by medical writers. We have met quite a number of cases of it, some very severe.

The author distinguishes autumnal catarrh from "Summer Cold," "Rose Cold," and the "Hay Fever" or Hay Asthma of England. He says it is properly called by the last mentioned name, but it is important to add that haymaking in the Middle States takes place in June, and Hay Fever with us is identical with the Rose Cold of New England. Hay, he thinks, does not cause the disease; though we have met cases where it was difficult to deny this; and what its cause really is, he does not venture to decide, though inclined to attribute it to "vegetable influences of some kind."

The description of the symptoms is full and careful, and the illustrative cases are numerous and well narrated. The prognosis of the disease is unsatisfactory except in one respect; that it does not appear to shorten life. Its treatment, from this, we may judge, is not strikingly successful. The only drug of any avail has been quinine, in two grain doses thrice daily, commenced a week or so before the attack comes on. In our experience this has availed nothing, while opium, referred to but slightly by our author, has had excellent temporary effects. The true remedy is *change of locality*. The most interesting result of Dr. WYMAN'S researches has been to show that there are many localities where autumnal catarrh does not prevail. These are depicted on three maps, one of the New England States, one of the United States, and the third of the White Mountains. The localities of exemption do not seem to be characterized by any peculiarity which we can understand. Elevation is an important factor, but is not an invariable or an only one. Some quite lofty peaks, Mt. Monadnock, for example, offer no place of escape; while the whole tier of southern counties in New York, famous all over the world for their admirable adaptation to seed and fruit culture, are among the exempt localities. The study of local influence here opened by Dr. WYMAN deserves to be prosecuted much further.

Transactions of the Medical Society of the State of New York, for the year 1871. 1 vol., 8vo, pp. 490.

The meeting of the society to which this volume applies took place early in February, 1871. A year and three-quarters, nearly, is a long time, in this busy age, to await the publication of even the most learned society's Transactions. Consequently many of the authors of the original essays this volume contains have long since published, in the periodicals of the profession, the articles embraced in it. No one can criticise them for this, but it detracts, of course, from the freshness and the value of the volume itself.

There are in all twenty-seven contributions on medical and surgical subjects, besides various biographical sketches, etc. We shall not enumerate these, as a mere list would have little interest, and for a more extended notice we have scant space. Among the writers represented are Drs. D. B. St. John Roosa, Thomas Addis Emmet, Nathan Bozeman, Lewis A. Sayre, C. R. Agnew, S. Fleet Speir, Samuel Peters, John P. Gray, C. C. F. Gay, Joseph G. Richardson, E. R. Squibb, James S. Bailey, and others whose names are guarantees of thorough work.

The plan adopted by the New York State Medical Society in its annual volume of Transactions does not impress us so favorably as that of the Pennsylvania Society. The former work consists of a series of detached essays, any of which would be equally appropriate in any other collection of medical articles; the latter is chiefly made up of a series of county Reports, which give, in their totality, a medical history of the State for one year, compiled by many observers, comprehensive and distinctive. This we hold to be the more proper sphere of action of a State Medical Society.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, DEC. 7, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

TREATMENT OF THE INSANE IN ALMSHOUSES.

"Rattle his bones over the stones,
He's only a pauper, whom nobody owns."

We have had some personal experience with guardians of the poor. For seven long, dreary years we labored for the improvement of the condition of the insane in an almshouse, the average number of patients under treatment being between six and seven hundred. We can speak feelingly of the difficulties encountered by a conscientious physician in such a position.

In view of our own experiences and feelings, but without a full knowledge of the following case, further than what we gather from the newspaper reports, our sympathies are decidedly with Dr. ECHEVERRIA.

It seems that a patient in the Ward's Island Asylum, a New York City institution, LOUIS C. SAMUELS by name, was admitted on the 13th of August, and that he died from ill treatment in the latter part of October. The following testimony was elicited at the coroner's inquest:—

Mr. Isaac Bell, one of the Commissioners of Charities and Correction, said: The Commissioners do everything in their power to alleviate the sufferings of the patients under their charge. The rules which govern Ward's Island are the same as those which govern other institutions of a similar kind.

All disputes between superior and inferior officers are investigated by the Board, and care is taken that the inmates are treated with justice and humanity. The reason why the resident physician has not sole charge of the Asylum is in accordance with a rule which provides that no physician shall have charge of more than 400 patients at one time.

The doctor's duty only extends to seeing that the diet given to the patients is such as will conduce to their well-being and health. (Italics ours). In explaining the manner in which supplies were obtained, Mr. Bell said the meat for the Asylum was bought by a man *at the rate of one cent per pound.* (Italics ours). For this he delivers the meat to the ice-house and packs it. On the 25th of October the witness got a communication from Dr. ECHEVERRIA, the resident physician, stating that no potatoes were supplied to the Asylum, and that the bread was light, but Mr. BURKE, the Warden, subsequently informed the Board that the arrival of the potatoes had been delayed a short time, and that the bread was of good weight. The Commissioner further stated that the wages given by the Board guarantees a good class of men. There is no lunatic asylum in the country where the attendants are so well treated. He was not prepared to swear that the Board have no cause of complaint against Dr. ECHEVERRIA: they are now examining into the condition of Ward's Island, simply because charges are made against the Asylum.

Dr. Guy D. Daley, Assistant Resident Physician at the Asylum, testified that deceased was admitted on the 13th of August, and described the treatment prescribed by Dr. Haydon; he had, in addition to the regular house diet, two quarts of milk, two eggs, and six ounces of rice daily, to bring up his system, and when the violence returned this was discontinued, and sedatives were given, but without effect, and other treatment tried; Dr. Echeverria knew of these changes; Samuels was constantly complaining of violence on the part of the attendants, but he (witness) was satisfied it was only the result of his lunacy; all the patients made such complaints; Samuels said he had been forced into a cold bath; witness does not think it was true, or he

would probably have had pneumonia; persons similarly affected to deceased frequently died suddenly; the cause of death in this case he believed to be exhaustion, from the brain disease; he slept but very little; the diet is very liberal, and sufficient for a laboring man; has had two attendants dismissed, but for neglect of duty, not for cruelty to patients; only in one instance had he seen an attendant intoxicated; he did not believe that the deceased had got a cold bath from McDonnell on the 27th of the month; ward M was filthy, because the filthiest patients were sent there; that is, patients who were unable to control themselves.

Dr. Echeverria, the Resident Physician, here stepped forward and said that his veracity had been impugned, and his professional reputation was at stake, and he therefore felt constrained to make a statement in answer to the assertions of witnesses previously examined.

In reply to the assertion of the witness, Galvin, that he had not seen the patient from the 25th of October until his death, he produced his diary, which showed that he had taken notes on the 26th, of Samuels' condition; on the 27th that McDonnell had given the deceased a cold bath; that on that day McDonnell was alone in Ward M, under the influence of liquor; on the 30th, the deceased had died the night before.

In reply to the assertion that the patients got sufficient food, he read a note from his diary dated Oct. 19, which stated that a patient named Martin was struck and severely cut by another patient named Jordan. When the Doctor asked the latter why he had struck him, he replied: "If you were as hungry as I am you would strike him."

He then quoted a report of an investigating committee, composed of Profs. Doremus, Ogden, and Chandler, on the condition of the hospital, which states:—

Early in the present year—indeed soon after the first occupation of the building—diarrhœa became prevalent. It was followed by typhus so malignant and destructive that Wards E and F had to be closed. Since the 6th of April no death from that cause has occurred, but a material influence is manifested throughout the asylum.

In investigating the causes which have led to these results we should separate those which have locally affected the closed wards from those which influence the whole building.

Directing our attention, then, specially to the former, we have concluded that the fatal effect was very largely due to overcrowding. What can be expected, when in a space originally intended for the accommodation of sixty patients, 170 were placed; when in one intended for twenty-eight there were fifty-four; when, from some one of the other hospitals, cases of the worst kind were transferred to this; when many of the patients were absolutely naked, and in a lousy and filthy condition; when the bed accommodation was inadequate, and an insufficient provision of benches or chairs to sit on, and many were sleeping on the floor.

We have had several long and earnest conversations with the Resident Physician, Dr. Echeverria, respecting this state of things. We believe that the fatal difficulty was due to an overcrowding of patients, whose condition was exceedingly bad, brought largely from other establishments; that he did whatever he could; and, after a strict examination into the matter, we feel it our duty to add that his conduct meets our approval.

In reply to the sworn statement of Galvin, one of the attendants, that the patients had sufficient food, he produced his letter, addressed to the witness, stating that there was not. Benches and seats had been ordered by him, the witness. They were sent by the Commissioners, but the Warden had sent them away again, and the patients now sit on the floor. On the 5th of July, against his orders, Dr. Daley took a maniacal negro from his cell, after 10 o'clock at night, and made him dance and sing until nearly morning, and this without any authority. Finally he said his orders were a dead letter.

This concluded the testimony in the case, and the jury, after a short deliberation, rendered the following verdict:—

"We find that the deceased (Louis C. Samuels) came to his death from exhaustion, caused by improper treatment, at the hands of ignorant and incompetent attendants; further, that the testimony shows a very loose and improper administration of the affairs of the institution; that the Warden and attendants should be persons of temperate habits, with a proper amount of intelligence for their positions; that they should co-operate with the Resident Physician, instead of obstructing him in the discharge of his duties; that in furtherance of this object, we recommend that said Physician should be consulted in the appointment of said Warden and attendants, and that they should be subordinate to him."

The testimony showed that the Warden, and a majority of his subordinates, were very intemperate in their habits, and it seems that three cases of murder by brutal attendants had occurred within six weeks! Yet this fellow could countermand the

orders of the Resident Physician, and have the patients treated pretty much as he pleased! Dr. DALEY, who seemed to testify in the interest of the Commissioners, and perhaps, of a promotion, deposes that a very excellent diet was "ordered" for Samuels. Can DALEY swear that the poor man *got* the extra diet? *We trow not!* No doubt the extra diet was drawn, to the last addled egg, and ounce of watered milk, but there is an alembic in these institutions which often turns these "extras" that are not consumed by the attendants into whiskey, unless a very close watch is kept by the physician.

But what can the physician do? The whole system of management of these institutions is vicious in the extreme. The physician should always be the chief officer, with power of appointing, or at least recommending his subordinates, and be responsible to the Commissioners alone. In the case before us, the Resident Physician, who seems to have tried conscientiously to do his duty, was discharged by the Commissioners, *and the drunken Warden was retained!*

The following letter from Dr. ECHEVERRIA to the Board of Commissioners will be found interesting:—

To the Board of Commissioners of Public Charities and Correction:—

GENTLEMEN:—At your meeting of the 4th inst., held at the City Asylum for the Insane, you stated to me that the Board had no complaint against me, excepting that I was not agreeable to the Warden of the Asylum. At your subsequent meeting of the 8th inst. you saw proper to remove me, without previous notice, from the position of Resident Physician to the Asylum. This removal, after the above official declaration, and in the face of a verdict of a Coroner's jury exonerating me from all blame in the matter of the killing of Louis C. Samuels, and sustaining my position, accompanied, as your action has been, by a transfer of the Warden, Edward Burke, to a post in the Almshouse no less responsible than the one for which he proved so unfit at the Asylum for the Insane, is a course which I can attribute only to malice, engendered by my fearless and truthful exposure before the Coroner's jury of the mismanagement of the Ward's Island Asylum.

From the time that I took charge of that institution until my removal by you without a hearing, I earnestly protested, as my correspondence with your Board will show, the publication of which I demand, against the manner in which the Asylum has been conducted, with the view of promoting political interest instead of the welfare of the insane therein. The jury in the Samuels case not only upheld me, but publicly condemned your lax and improper administration of that institution, and also censured the Warden and attendants, whom, by your own course, you have sustained and kept in the public service, under your control. The subject of the starvation, cruel treatment, and disgraceful maintenance of the inmates of the City Asylum for the Insane, has been laid by me before the Grand Jury and the Attorney-General, and will doubtless be made the basis of an inquiry, which will bring to light, for the impartial judgment of the people, not only abuses and evils alike shocking to every sense of humanity and decency, which characterize the management of the lunatic asylums under your charge, but will once more exonerate me from all blame in the discharge of a duty which, though it brought upon me your displeasure and consequent dismissal, will earn for me the thanks of suffering humanity and the community at large.

Yours, etc.,
M. G. ECHEVERRIA.

New York, Nov. 9, 1872.

OUR HOSPITAL AND CLINICAL REPORTS.

Our readers will have noticed that with the opening of the regular courses of instruction this fall, we have commenced several series of Hospital Reports. There is no more instructive reading for the practitioner than these, and those we shall give shall be written by practiced hands, from carefully selected material.

The medical clinics of Prof. J. DACOSTA, of the Jefferson Medical College, will continue to be presented by the able pen of Dr. RALPH W. TOWNSEND, and will form a series embracing all the principal diseases, with the laws of their diagnosis and treatment, by an authority second to none.

Surgery will be represented by the instructive clinics of Prof. D. HAYES AGNEW, of the University of Pennsylvania, reported by Dr. DEFOREST WILLARD, whose accuracy and care render them of universal value.

Diseases of the Eye and Ear, as they appear at the extensive clinic of the Wills Hospital, of this city, under the care of Dr.

P. D. KEYSER, will be reported, with special reference to the wants of the general practitioner, by Dr. WILLIAM F. CHURCH.

Prof. S. D. GROSS, *facile princeps* among American surgeons, will be faithfully followed in his most interesting operations and his unsurpassed treatment of surgical diseases, by Dr. FRANK WOODBURY, with whose excellent style in such reports our readers are already acquainted.

With such coadjutors we can safely promise a medical journal not merely unsurpassed, but, in this respect, unequalled for practical utility by any in the land.

NOTES AND COMMENTS.

Obituary of Dr. J. F. B. Flagg, M. D., D. D. S.

Died, at West Chester, Pennsylvania, September 8th, 1872, J. F. B. FLAGG, M. D., D. D. S.

Dr. Flagg was born in Boston, Mass., May 12th, 1804. At a suitable age he enlisted as a student of dentistry under the tutorship of his brother, Dr. J. F. Flagg, of Boston, and, becoming qualified, entered upon the practice of his chosen profession at Providence, R. I., in 1826.

He was particularly prominent as having announced to the dental and medical world that the so-called "Letheon" of Mr. Morton, of Boston, was simply washed sulphuric ether, thus *securing* to them an *unpatentable* material. He continued much interested in this anæsthetic, enjoying a large and lucrative practice in its administration, and in 1851 published a work on "Ether and Chloroform," which remains standard authority even to this present writing.

He was elected to the chair of Anatomy and Physiology in the Philadelphia College of Dentistry, in 1855, and maintained the position as a peculiarly acceptable lecturer until 1858; he, however, never relaxed his interest in the cause of dental education, and at considerable pecuniary loss operated an infirmary for the occupation and instruction of students during the summer season; but the plan was relinquished after having failed to command the encouragement to which its merit entitled it, and which would, at the *present time*, most unquestionably be accorded a similar institution.

To Prevent the Pitting of Small-Pox.

Dr. Hutton, of Shenandoah, Pa., whose articles on "Amputations of Cervix Uteri," and "Prediction of sex in Utero," have recently appeared in the "REPORTER," thus writes us on this subject:

"A few months ago, during the prevalence of an epidemic of variola, which 'still drags out its weary length,' I was called to the bedside of a little girl whose only symptom at the time was epigastric pain. A mustard poultice was applied. Soon afterwards two huge worms of the lumbracoid variety were voided by the mouth.

"But to the point: unmodified variola immediately succeeded, and it was observed that no eruption appeared on the surface to which the poultice was applied. Based on this observation experiments were instituted in other cases with the same result.

"Query: If in cases of variola the diagnosis be made, even as late as the middle of the primary fever (as it usually can be, especially if it prevail epidemically), and the poultice or rubefacient be then applied, may we not by preventing the eruption avoid the much feared pitting.

"But having advanced *the* suggestion intended another arises in query form: If the greatest danger in variola is consequent on the secondary fever, and is due to, and in proportion to, the intensity of the eruption, may we not hope to be enabled to modify the eruption generally, and consequently the danger, by turning to practical account this observation?"

Model Testimony in a Case of Insanity.

There is a class of lawyers, as there is a class of so-called doctors, who are ready for any dirty work, provided, always, they are well paid for it. The case of "Sister MARY STANISLAUS," a nun, who is undoubtedly insane, has been before the courts in New York time and again, "called up," "remanded," "postponed," and "referred," in a way that judges who have an eye to the "business" of the attorneys, know "how to do it." The following is a sample of some of the testimony that has been given in the case.

A "botanic doctor," recently, at one of the hearings, gave testimony to the following effect:—He defined "dementia" as "a wrong state of mind;" "insanity" as "a want of proper memory;" and "delusion" by stating

the fact that "one person may delude another." He also announced that his treatment of insanity consisted in the administration of a peculiar medicine compounded by himself, and that he ignored all books on diseases of the brain, preferring to "go by his own mind." In other words, he admitted that he was profoundly ignorant of the disease he was employed to treat, and that his only method of treatment was to dose his unfortunate patients with a nostrum unknown to the materia medica. A nice sort of person, this, to tamper with the most difficult of all diseases.

The Epizootic Influenza.

This disease continues its progress throughout the country. The Health Department of New York report that in the great majority of *post-mortem* examinations traces of pneumonia and other diseases have been found. It has also been observed that only the old, poor, and overworked horses die from the disease, while those that have been previously in good health, and well cared for generally, recover in a few days. The symptoms of the disease, just before death, resemble typhoid fever, and the smaller intestines show signs of the same disease. All the inspectors concur in the opinion that the disease is not contagious. It was also said that uncleanliness and bad ventilation of the stables aggravated the disease, while in stables that were kept clean and well ventilated, and in which the horses were properly cared for and fed, the epidemic assumed a much milder form.

J. J. Woodward, assistant surgeon in charge of the army medical museum, says, "Within the last few days I have collected the organic forms from a quantity of the air of a stable in this city, in which were a number of sick horses, and submitted them to the highest powers of the microscope without finding anything which is not usually encountered when no epidemic is prevalent, and I have also subjected the mucous discharge from the nostrils of several sick horses to the same examination, with the like negative results."

Post-mortems in this city have shown death from purely local lesions in the trachea, larynx, pharynx and nares. No false membranes are discovered. Dropsy is a not unfrequent sequela.

A similar epidemic, less violent however, prevailed in this country about twenty-five years ago. In England, several have been known this century, and are recorded by Stanhope in his work on farriery.

Dr. Edwin M. Snow, of Providence, remarks: "It is possible that epidemic influenza may follow the epizootic influenza, now prevailing among horses, as is not unfrequently the case."

We have learned of no authentic cases of contagion to the human subject, though several have been reported by the public press.

To Subscribers.

We earnestly request our subscribers to be *early* in their remittances for the coming year.

The rule to *pay in advance* is one we shall have to insist upon with greater earnestness than heretofore. Printers, binders, and assistants must be paid *weekly*, and hence advance payments are essential to the success of a periodical of frequent issue.

We beg all who wish either the Medical and Surgical Reporter or the Half-Yearly Compendium to pay *before* their subscription expires, or the delay will endanger the receipt of their journal, and back numbers cannot be obtained from us with any certainty, as we print few in excess of our regular list.

Exposure of Quackery.

We are glad to observe that the *American Farmers' Advocate*, an excellent and widely circulated journal, published at Jackson, Tenn., lends its influence, with that of the *American Agriculturist*, to the exposure of quacks in medicine, and other humbugs.

In a recent issue it says:—Have nothing to do with the "Peabody Medical Institute," Boston, "The Howard Benevolent Association," nor any similar concerns. By giving a wide berth to all patent medicine dealers you will consult your own interest. It is to be hoped that the whole country will, ere long, accord to these quacks just such a reception as they are now receiving in Chicago.

Medical College of Ohio.

The College museum of the Medical College of Ohio, Cincinnati, has just received a valuable acquisition in the shape of the artistically prepared skeleton of "Old Man Dead," the College Resurrectionist for the past forty years. The skeleton is seated on a tombstone, with spade in hand and pipe in mouth, in perfect self-complacency, apparently over a recent successful "job."

Correspondence.

The Control of Prostitution.

Eds. Med. and Surg. Reporter:

Your article on prostitution has awakened a desire to offer to the readers of the Reporter some of my views upon this social morbidity.

Prostitution is not constituted by mere sexual intercourse; but by certain accompanying conditions; for such intercourse, under proper provisions, is but a compulsory compliance with nature's laws.

While I highly approve of sanitary and reformatory institutions, for the good which may arise therefrom, I deem it perfect folly to attempt penal legislation as a prohibitory. It seems that the advocates of this measure have entirely overlooked the fact, that the true cause of this imperfection lies concealed beneath the corrupt conditions of society; and that it originated in that portion falsely termed the aristocracy, so termed because of their supposed wealth and practical antagonism to the dignity of labor; they also appear to disregard the propriety of eradicating the cause. Society, like religion and politics, has its high, low and intermediate positions; and not unlike them, wealth is generally the main passport to these positions; nearly all are aspirants, and in their passionate strife for wealth, they often disregard honesty, morality, and even decency. With most people wealth is the great desideratum in matrimonial contracts; parents usually commence early, either in a direct or an indirect manner, to teach their children this cursed doctrine, as though happiness could exist only in the embraces of wealth; seeming not to realize that marriage for wealth is nothing less than legalized or matrimonial prostitution; to which condition parents not only give their consent, but almost force its consummation. Such sales (for that is the true term) generally lead to adultery and divorce, or something worse. Was not wealth and indignity to labor adopted among the would-be higher class, as passports to matrimony, labor (the parent of wealth) would be generally known as a dignity, which would induce nearly all to marry at a proper age, and under proper affectionate conditions; thereby supercede the necessity for fornication and prostitution; then divorce to a very great extent would be a thing of the past; thus it will be perceived that prevention does not legitimately belong to the medical profession, but is entirely under the control of society, consequently prohibition will await the reorganization or progression of society upon some of the principles of righteousness.

D. L. D. Sheldon.

New York City.

Dr. Louisa Atkins, a graduate of the medical school of Zurich, is house surgeon in the Birmingham and Midland Hospital for women, having successfully competed with a number of male applicants for the position.

News and Miscellany.

Dartmouth Medical College.

In the Address of President Smith, at the recent Commencement of this Institution, located at Hanover, N. H., reference was made to the liberality of E. W. Stoughton, Esq., of New York. He has given some $15,000 for the improvement of the edifice; particularly for the establishment of a Museum of Pathological Anatomy. A beautiful hall for it is now nearly finished. President Smith's address was on the "Responsibilities of Professional Men," with special reference to the Medical profession. Near the close, he remarked as follows:

"Impressed by views like these, I cannot but rejoice in the auspices under which we meet today. This Institution of the olden time, on whose roll such distinguished names are borne, has received, I am happy to say, a fresh impulse. I congratulate the Faculty and the students on the new facilities and helps with which they are to be furnished. I see in that recent munificence of which the occasion reminds us a signal confirmation of the views I have presented. A donation from a medical man to a medical Institution is no strange thing. But when, from the dust of the legal arena, a lawyer steps forth, and, forgetting his precedents and his pleas, his bills and his briefs, forgetting, for the moment, the wants of the schools of legal lore, essays, at a cost of thousands not a few, to give new touches of beauty to those old halls and to fashion within them a very palace of pathological science, a place where disease shall gracefully yield up its secrets to the inquiring eye, we have evidence irrefragable that I have not exaggerated either the worth of the Medical profession, or the responsibilities connected with it. We have, too, a new and brilliant illustration of the harmony of the professions. Whatever the architect may place, or fail to place on the walls of yon Medical College, I shall ever see written there the honored name of E. W. Stoughton."

The Use of Sewing Machines.

During the late session of the State Medical Society of Virginia, at Staunton, Dr. Parker read a very interesting paper on the subject of sewing machines and their effect on the health of women, in which the conclusions were announced:

First. That fatigue is not disease, and that there is no reason to conclude that the use of the muscles employed in machine-work for a reasonable time is injurious. Second. That the machine may be used for four or five hours daily in a family, by a lady in ordinary health, without injury. Third. That the damage to health in the factory is due to the hygienic conditions under which the work is done, and the natural delicacy of some of the operatives, unfitting them for long-continued labor of any kind. Fourth. That the sewing-machine is a

great boon to womankind, increasing her compensation, protecting her sight, and in the family lessening her labors.

The Horse Disease.

An epizooty resembling the horse disease prevails among the cattle and poultry in the vicinity of Newark, N. J. At Lyons Farms one farmer has lost 12 cows, and another 175 out of 200 chickens. The epizooty is also reported among cattle in Camden county.

The horse disease is increasing rapidly in Memphis, Tenn., and Wheeling, W. Va.

Cholera.

The cholera is advancing into Austria. Cases have occurred at Prague, Buda, Lemberg, and elsewhere. Vienna has so far escaped, but the city is in wretched sanitary condition, and the International Exhibition next year will probably suffer much by the epidemic.

Aims of Science.

The National Academy of Science held its closing meeting at Boston, on Saturday, Nov. 23d, and adopted a resolution for the appointment of a committee to memorialize Congress "concerning action upon scientific subjects, which shall tend to elevate the nation."

A New Hospital.

Messrs. Matthew and John Guy Vassar have decided to found a hospital in Poughkeepsie, and for that purpose will invest $100,000. The building will be erected on the corner of Lafayette place and Vassar street.

The Small Pox.

There have been 927 deaths from small pox in St. Louis since the first of May.

The number of small pox cases in Washington, from January 15th to November, was 512, and of small pox deaths, 111.

The Augusta Medical College of Georgia has been made the Medical Department of the University of Georgia; a compliment well bestowed and fully merited.

The Rev. Canon Charles Kingsley, renowned for his novels in favor of "Muscular Christianity," has been lecturing the Birmingham folks on the art of preserving health.

A Brooklyn doctor, whose leg was recently broken by an accident on a street railway, sued for $20,000 damages, and was awarded $7100.

Dr. Freitz, Professor of Anatomy at the University of Prague, is deceased. He poisoned himself during an attack of melancholia.

NOTES AND QUERIES.

"*A Student*," who requested an answer to a communication regarding the treatment of aneurism, through the columns of this journal, will confer a favor by calling upon the person addressed. M.

Philadelphia, Dec. 2d, 1872.

MARRIAGES.

Angelo—Gardener.—At the residence of the bride's parents, Nov. 27th, by the Rev. Father Carter, Antonio C. Angelo, of Venice, Italy, and Ella B., daughter of W. Gardener, M. D., of this city.

Barrows—Odell.—On Thursday, Oct. 24th, in the Brick Church, N. Y., by Rev. Dr. Murray, Arthur A. Barrows, M. D., to Edith, only daughter of Lyman Odell, all of N. Y. city.

Buck—Thackara.—In this city, Nov. 7th, by Rev. Dr. Withrow, Dr. William Penn Buck and Julia E. Thackara, all of Philadelphia.

Doolittle—Ludlam.—Nov. 26th, at the residence of the bride's parents, by Rev. H. D. Doolittle, assisted by Rev. Dr. Kendrick, Egbert D. Doolittle, M. D., of Phillipsburg, N. J., and Julia Frances, daughter of David Ludlam, Jr., of this city.

Gifford—Cooper.—In this city, Nov. 7th, by Rev. Dr. Withrow, Dr. William H. Gifford, of Indiana, and Emily B. Cooper, of Delaware.

McCully—Notson.—October 22d, by the Rev. Dr. Roach, Asher S. McCully and Helen S., youngest daughter of Dr. William Notson, all of Philadelphia.

Mott—Wilson.—At the Collegiate Church, Fifth avenue and Twenty-ninth street, New York, Nov. 21st, by Rev. John Hall, assisted by the Rev. William Orminston, J. Varnum Mott, M. D., and Sarah E., daughter of John D. Wilson, all of that city.

Purington—Davis.—At Sunnybank, near Blairsville, Indiana county, Pa., by the Rev. James Davis, Agustus F. Purington, M. D., and Lida I. Davis, daughter of the officiating clergyman.

Sias—Jerralds.—Nov. 12th, by Rev. Wm. B. Stewart, Ira E. Sias, of Spencerport, N. Y., and Mrs. Martha W. Jerralds, M. D., of Worcester, Mass.

DEATHS.

Baldwin.—In New York, Nov. 27th, Elizabeth Baldwin, widow of Dr. William Baldwin, in the 92d year of her age.

Beidler.—At Bridgeport, Montgomery Co., Pa., on the 27th ult., Dr. Daniel Beidler, in the 57th year of his age.

Heaton.—Dr. J. F. Heaton, of Indiana, an officer in the medical division of the Pension Bureau, died in Washington, Nov. 24th.

Waller.—At Linwood, Delaware county, Pa., on Nov. 20th, Dr. Tracy E. Waller.

OBITUARY.

Dr. T. E. Waller, one of the oldest graduates of the Jefferson College, died on Wednesday, 20th ult., of paralysis of the brain. He was well known to the medical profession of this city and throughout New Jersey, having been possessed of eminent professional ability and large experience. For several years Dr. Waller practiced his profession in Burlington county, New Jersey, and of late years in Linwood.

THE

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Original Department.

Communications.

REFRACTIVE INEQUALITY OF THE TWO EYES.

By Swan M. Burnett, M. D.,

Of Knoxville, Tenn.

Read before the Knox County Medical Society.

As a law, corresponding organs upon the right and left sides of the body are symmetrical; the right and left upper and lower extremities are exactly similar in their organic structure, though, from excessive use of the one or the other side, it may be developed in a greater degree.

This law applies with equal exactness to the two eyes. They are symmetrical, as a rule, in a remarkable degree; the color of the iris, size of the pupil, and even the course and number of the conjunctival vessels upon one being the exact counterpart of the other. This similarity is even extended to congenital defects and pathological conditions, *coloboma iridis* being found often not only in both eyes, but occupying the same position on the iris in each. All the forms of *amitropia* are found in nearly the same degree in both eyes; even that very irregular anamoly, *astigmatism*, conforms, in a greater or less degree, to this law. In structure, then, they are strictly homologous. In function, however, as in the case of the extremities above alluded to, there will always be found a slight difference. We use one eye generally in preference to the other. This has been called by Kaiser (Oph. and Ot. Archiv., Vol. I, No. 1) the *predominating* eye. For instance, in taking aim with both eyes open, it is always done with one eye, and that generally the right. Thus, if you fix an object and advance the fore-finger, held vertically, from either side, especially the right side, both eyes being open until the object is covered by it, upon closing one eye you will generally find that the right has been the fixing eye. That this is the result of education is proved by the fact that in many, left-handed persons especially, the left is the predominating eye.

But, as an exception to the general law, we occasionally find a difference also in *structure*, and its effect upon vision is strongly marked. Two cases, opposite in character, have recently fallen under my notice, which I will make a basis of some remarks upon this interesting subject, too little brought to the notice of the general practitioner.

Case I. *H of* $\frac{1}{8}$ *in L. E. E in R. E. No deviation.*

D. F., æt. 16, two years ago suffered from a severe conjunctival inflammation, caused by getting a piece of coal in his eye. As a result of this he thought his sight in that eye had become defective. It was only after the attack that he had noticed any defect, and then it was only by closing the other eye that he became aware of it. The eye, so far as external appearances went, was healthy looking, nothing abnormal being found in either the cornea, iris, lens, or humors. Examination showed that he was barely able, with that eye, to distinguish cc at 20 feet, whereas with + $\frac{1}{8}$ he could read xxx. With the same glass he could read

No. 8 of Jeager, at 18 inches, showing that his accommodation was good. S, however, was somewhat defective. The R. E. was found, upon examination, to be emmitropic. He had, therefore, H = $\frac{1}{5}$ in the left eye. This was confirmed by the ophthalmoscope, the fundus being distinctly visible by the direct method, even with considerable accommodation on the part of the observer. There was no deviation of either eye.

Case II. *M of* $\frac{1}{5}$ *in R. E. Emmitropia in Left. Strabismus divergens.*

Miss K. M., æt. 24. In her childhood, even, there was noticed an occasional tendency to an outward deviation of the right eye. This disposition increased with her years, and now the strabismus is permanent. She, however, does not suffer from diptopia. This is very readily accounted for by the fact that in divergent strabismus the image in the deviating eye is from a portion of the field of vision so distant from that of the fixing eye that it is readily suppressed. On examination, M = $\frac{1}{5}$ was found in the deviating eye. The ophthalmoscope corroborated this and also showed the characteristic atrophic element around the optic nerve entrance. S. was somewhat defective in that eye; she being only able to read xxx at 20 feet. The left eye was found to be emmitropic. In this case there was observable some slight asymmetry of the face, the size of the right side of the forehead and upper portion of the face appearing to be in excess of that of the left. She has had at times those signs of irritation that are so common in myopic eyes, for one of which I treated her by the usual method of *complete* rest of the eyes and the antiphlogistic regimen.

One of the principal differences, it will be observed, between these two cases is, that in one there was strabismus and in the other there was none. Is this simply a coincidence, or is it the result of a cause operating in one that is not in the other? Let us examine and see. Take the case of H first. There is no doubt but that he has always been affected with H, even from his birth, for it is always congenital, depending as it does upon a shortened antero-posterior diameter of the globe. He had simply overlooked it up to the time when, after the inflammatory attack, he closed the other, and looked with that alone for the first time. In the education of the sense of vision that immediately follows birth, the *corresponding percipient elements of the two retinæ were adapted to the altered conditions*, and the hyporepic eye participated, to a certain extent, in binocular vision, although the image was much less distinct than that of the normal eye. That an indistinct image in one eye materially assists vision with the other is shown by placing a weak convex glass before one eye and looking at an object, first with one eye and then with both. When the object is viewed with each eye separately, there is a considerable difference in the size of the images, the one in the armed eye being the larger; but, when viewed with both eyes together, it assumes a size intermediate between the two, the object is more clearly defined, and especially is stereoscopic vision improved. This was the case in the present instance; there was some assistance given to the normal eye by the hyporepic one, and thus there was an incentive to maintain binocular vision, and as there was nothing in the refractive differences to cause an *active* deviation, the normal relation between the optic axes was preserved, and strabismus did not occur.

In the second case, however, it was different. Undoubtedly in this instance the myopia had been progressive. During early childhood it was, perhaps, not present at all, or if so, in a very low degree. It was during this time that the corresponding percipient elements of the retina were educated, and the relative positions of the optic axes were adopted accordingly. As the myopia increased and the organic change in the globe progressed, the percipient retinal elements, on account of the bulging, posteriorly and laterally of the posterior portion of the globe, had so changed their position that they no longer, during the normal position of the optic axes, corresponded to those of the other eye with which they had been coeducated. Consequently, when the axes were in normal position images no longer fell upon corresponding percipient retinal elements, *which is absolutely necessary to the procuration of binocular vision.* Hence, instead of assisting to define the image it served to confuse it, and in order to avoid this confusion one eye is allowed to deviate passively outward. As in the former case there is nothing in the refractive condition of the myopic eye to actively produce strabismus, but by rendering binocular vision impossible by confusing the image in the healthy eye, it simply does not prevent it.

So long then, we see, as the amitropic eye assists in any degree in binocular vision there will be no deviation; it is only when the eye cannot so participate that strabismus occurs, thus showing that the sole cause of the normal relative position of the optic axes is the faculty of binocular vision.

Differences in the refractive conditions of the two eyes may assume various forms. One may be emmitropic and the other myopic, or Hyperopic, as in the cases just related, or there may be different degrees of either myopia or Hyperopia.

In the treatment of these cases it would naturally suggest itself that all that would be required to make the two eyes equal would be to completely neutralize the ametropia of the affected eye. In practice, however, this has not been found to answer, and upon reflection we can readily see the cause, viz: the difference in the *size* of the two images. If we use a convex glass, the image is increased; if a concave glass, it is diminished in size; and in either case the rays from any part of an object do not fall upon corresponding points of the two retina, which we have seen is essential to binocular vision, and as a result, the image becomes blurred. Within certain limits, however, we are able to make a compromise between the two eyes; if, for instance, the difference in refraction does not exceed 1-30 or 1-40, for then the size of the image is not sensibly altered. In high or even moderate degrees this is not admissible.

In cases where there is deviation, the question as to the propriety of an operation naturally arises. For visual purposes it would avail nothing, for it can never be made to participate in binocular vision. In fact, as we have already seen, it was because it could not assist in binocular vision that it deviated primarily. For cosmetical purposes an operation is equally unsatisfactory, for though we may be able to procure parallelism for distant vision, still those eyes are very rarely able to converge well. In cases where there is myopia in one eye, with an outward deviation, it is best to use the deviating eye for near work, and the other for distance; you are thus enabled to retain the visual power of the deviating eye, something very much to be desired in case the other should from any cause become lost. If an effort, by constant practice, is not made to retain this visual power, we will have *amblyopia and anopsia.*

TEACHING THE DEAF AND DUMB TO SPEAK.

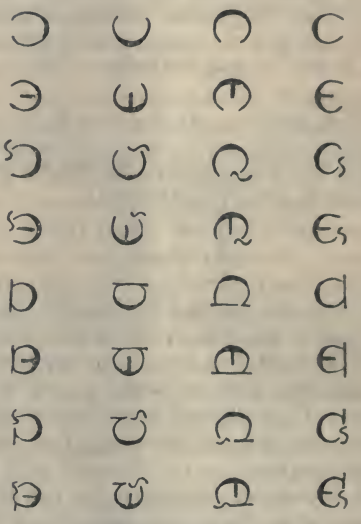
By Laurence Turnbull, M. D.
Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

Continued from page 495.

The broken outline of the face, which has been retained as an assistance to the memory, is now dispensed with, and the pupil is required to describe all the symbols again.

For the convenience of the reader the names of the symbols are given in a tabular form, using the initial letter of the words, shut, voice, nose, lip, point, front, back.

Fig. 2.



(*Key to Fig.* 2)

N V	L	P	F	B
	LV	PV	FV	BV
	LN	PN	FN	BN
	LVN	PVN	FVN	BVN
	LS	PS	FS	BS
	LSV	PSV	FSV	BSV
	LSN	PSN	FSN	BSN
	LSVN	PSVN	FSVN	BSVN.

It will be observed that, though at the first lesson thirty-four characters have been introduced, the memory is burdened with only four forms, viz: a curve (turned in different directions), a crooked line, a thick, straight line, and a thin one.

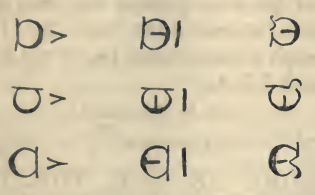
Though the sounds of speech may be *infinite* in variety, they are all formed by a limited number of organs; and they can all be represented by the combinations of ten elementary symbols.

The name of a sound-symbol is in reality a command *to do something with the mouth.*

Take, for example, the first character in the eighth line (see illustration), "lip, shut, voice, nose." This is, in effect, a direction to shut the lips and pass the voice through the nose. In explaining this symbol to a deaf mute, one of his hands is placed upon the teacher's throat, and the other against the nose. If, then, the teacher makes the sound of the letter M, the pupil *sees* that the lips are shut, and *feels* a vibration in the throat and nose.

The symbols in fig. 3 represent the sounds

Fig. 3.



of the following letters, as taught to the children in the Boston school:

P B M
T D N
K G NG.

All one can say concerning the Roman letters is, that P is P, B B, etc. But the symbols tell us that P is formed by shutting the lips, and then making a puff of air, while for B, the lips are to be shut while the voice is sounded, and then a puff of voice is to be given, etc.

The characters exhibit to the eye all the relations that the sounds themselves do to the ear; and the organic relations are just as clearly shown:

As P is to B, so is T to D, and K to G.
As B is to M, so is D to N, and G to NG.
As P is to T, so is B to D, and M to N.
As P is to K, so is B to G, and M to NG, etc., etc.

P, B, and M have the "lip" and "shut" signs in common; and in sounding all, the lips are shut.

T, D, N, agree in shutting off the breath by means of the point of the tongue, and K, G, NG, in the closing action being performed by the back of the tongue.

Furthermore, the sounds P, T, K (represented by the same symbol, turned in different directions), are made by the same organic action performed at different parts of the mouth; so with B, D, G, and M, N, NG.

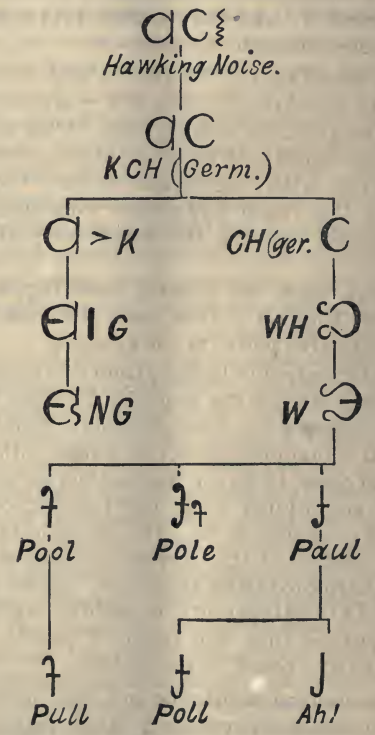
When a deaf mute has thoroughly mastered the meaning of the symbols, he is required to sound one of the characters; that is, the attempt is to be made to do with the mouth what the symbol directs.

The pupil, having little or no control over the movements of the vocal organs, will probably make a very different sound from that intended; but the first point gained is, that he makes a noise of some kind. Whatever it happens to be, whether a cough, or a growl, or a sneeze(!), it can be written symbolically. From this sound as a starting-point, others can be developed in every direction, until all the English elements have been obtained.

Mr. Bell illustrates this by a case that actually occurred.

A middle-aged deaf mute, a resident of Boston, was studying the symbols.

Fig. 4.



His attention was directed to the vibration of the throat in sounding voice. He attempted to imitate this by a peculiar hawking noise, somewhat as if he were coughing up phlegm.

After repeating the sound several times, he analyzed the representation of it (see fig.

4), and thus became conscious of what his mouth was doing. In forming this sound the tongue is first put back so as to shut off the air from the mouth. The breath is then forced out between the tongue and soft palate in such a way as to set the uvula vibrating.

Upon presenting the symbols to him, minus the "trill" or shake, he made the sound gently, and without vibrating the uvula. What he gave was, in reality, an English element (K), followed by the German sound of *ch*.

The next point to be attained was to separate these elements, so as to have the English sound on one side, and the foreign one on the other The first element of his sound was accordingly written with the sign for a puff of breath after it. He gave at once the letter K. The German *ch* was also obtained at sight of its symbol.

The attempt to pronounce K with voice produced G; and NG resulted from passing the voice through the nose.

By sounding the German *ch* with the lips nearly closed the English WH was obtained. W was given by adding voice. This sound may be considered, for all practical purposes, identical with the vowel *oo* in "pool." From this vowel five others were obtained by merely opening the mouth very gradually.

Thus, from the original hawking noise, eleven English sounds were developed by the directive power of the symbols.

This method of leading from one sound to another renders the acquisition of the English elements a matter of absolute certainty; but it is inapplicable to very young children. In all cases, however, mechanical assistance will accomplish what the intellect of the child is unable to do. The symbols inform the teacher of the correct position of the organs in producing any sound. By the exercise of a little ingenuity the child's tongue can be pushed into the required position by means of a pencil or pen-holder.

Mechanical assistance has been found to be so absolutely necessary that a manipulator of convenient shape has been constructed of ivory.

Suppose we fail to obtain K from a child; a sound of *similar formation, but further forward in the mouth*, may be experimented upon. We shall presume our pupil can pronounce T. In T, the shutting action is performed by the point of the tongue; in K, by the back (see fig. 3).

If the teacher holds the manipulator so as to prevent any portion of the tongue from rising *except the back*, the attempt on the part of the pupil to say T will produce K. The manipulator is at once placed in the hands of the pupil himself, and the experiment is repeated. A mirror held before his face shows him the position of his tongue. It invariably follows that after a few attempts the child is enabled to pronounce the sound without any assistance whatever.

A plan for the development of sounds by means of the manipulator has been devised. It may be interesting to know that twenty-six English elements can be *forced* from the one sound TH.*

(To be Continued.)

PUNCTURE IN THE TREATMENT OF ACUTE SYNOVITIS, AND ORCHITIS.

By A. B. Cook, M. D.,
Louisville, Ky.

It would be a waste of time to enter into a general disquisition on the nature, pathology, sequences, and treatment of synovitis and orchitis, these subjects being discussed in the standard surgical works. The journalistic reader wants facts developed in the treatment of cases, from the general results of which the best and safest combined modes of treatment are derived.

I propose briefly to give the result of early puncture, in preference to the course usually advised of deferring this valuable adjunct in treatment to a later period of the disease, or after other remedies have failed.

Case 1. W. C——, age 19, delicate constitution, scrofulous predisposition, was attacked with acute synovitis of the right knee joint, caused by exposure to inclement weather and active exercise on foot. The case presented the usual constitutional and local symptoms. The treatment at first was moderately antiphlogistic, followed by iodide of potash, iodide of iron, bitter tonics, etc; the local treatment consisted of absolute rest, fomentations, counter-irritation by blister, iodine, croton oil, pressure by bandage, all of which failed to make any impression on the fluid effused in the synovial membrane. I then punctured the synovia

* Opt. cit.

with an exploring needle having a deep groove, and removed the fluid; the joint was then enveloped in cotton batting and a bandage applied from the toes to above the knee. In two days there was a slight recurrence of fluid, which was removed by the same means; the cotton and bandage were reapplied; there was no further effusion. Six days later the cotton and bandage were removed, the elastic band was applied to the knee to give support, and the patient was advised to take gentle out-door exercise. In a few weeks the functions of the joint were entirely restored.

Case 2. D. B——, wash woman, age 40, a hard worker, health generally good, had acute synovitis of left knee joint, accompanied with constitutional fever and local acute pain, tenderness and swelling. Ordered antiphlogistic regimen, with opiates to allay pain; locally rest and anodyne fomentations. On the third day I detected slight effusion; inserted the exploring needle and removed about two drachms of serous fluid which gave great relief to pain. The following day I again introduced the needle and removed about one drachm of fluid. The joint was enveloped in cotton batting and a bandage drawn sufficiently tight to secure continuous gentle pressure; there was no reaccumulation of the fluid; in three or four days the patient was out.

I do not now hesitate to resort to puncture as soon as effusion is detected. As an adjunct to treatment its advantages are early removal of effused fluid; ready relief of pain; shortening the duration of the disease, and the prevention of the complications following the long continuance of hydrarthrosis. The pain caused by puncturing is very slight, and with proper care and knowledge of anatomy, there is no danger of injury being done to the structures of the joint. I prefer the grooved needle to any other instrument from the fact that it is simple, convenient, safe, easily applied, and excites no alarm in the patient.

In acute orchitis, effusion to a limited extent occurs early in the course of the disease, and from its gradual increase and pressure is a great source of the constant pain of which patients so much complain. For years past I resort to puncture when fluctuation is first detected, which gives immediate relief, shortens the duration of the case, and avoids the necessity of resort to the many remedies prescribed for the removal of the hydrocele. After puncture I apply to the scrotum, as indicated by the symptoms, either warm or anodyne fomentations, or stimulating embrocations, or lint covered with oiled silk, and retained by a suspensory bag or T bandage. In all cases the special, constitutional, and local treatment must be governed by the cause of the disease.

Hospital Reports.

WILLS OPHTHALMIC HOSPITAL.

Clinic of P. D. Keyser, M. D.

[REPORTED BY WILLIAM F. CHURCH, M. D]

Granular Lids, with Pannus.

W. J., æt. 23 years, was admitted, suffering with large fungus granulations and considerable chemosis. This is an affection characterized by a roughness and swelling of the conjunctiva. It often presents the appearance of hypertrophied papillæ, sometimes as vascular excrescences resembling roundish granules. It is a purely local affection, always proceeding from external injuries affecting the conjunctiva itself. Contagion plays the most important part. The purulent and muco purulent secretion of granular conjunctivities is the potent bearer of contagion. This disease is strictly a chronic one. We often find the cornea in a state of vascular haziness, as in the present case. The trachomatous development has passed from the granular conjunctiva to the superficial layers of the cornea, and so caused those changes which are known as *pannus*. Where this is present the patient is troubled by disturbance of vision.

The treatment in this case consisted in touching the granulations with *lapis mitigatus*, and using a compress bandage to reduce the chemosis. The *lapis mitigatus* that was here employed is composed of one part argent. nitrat to three of potassæ nitrat. This was followed by the local use of cupri sulph. in substance, touching lightly. Cases of this sort are always tedious, and require much time and patience for their successful treatment.

Pterygium.

W. B., æt. 66 years, presents himself suffering from a pterygium. He has had a chronic conjunctivitis of four years' standing, which has developed this pterygium. It is composed of a corneal and conjunctival portion. The corneal portion is generally a thick, tendinous, vascular, connective tissue formation. The conjunctival portion is nothing but a hypertrophy of the ocular conjunctiva, and the submucous tissue belonging to it. The pterygium is usually very loosely attached to the sclera lying beneath, and may often be raised up with forceps, from the apex to the base, like a

fold. Once developed it is permanent, its disappearance being extremely rare. The apex of the pterygium generally rests on the margin of the cornea, going often toward the centre, but rarely passing beyond. In the treatment, any inflammation must be combatted antiphlogistically, after which astringents may be used. When the symptoms of irritation have subsided, an operation for its removal may then be performed. There are several methods recommended, that of excision with a pair of scissors curved on the flat, that of ligation, by passing double ligatures through and around it, and that of transplantation. The operation on this patient was a combination of the first two mentioned methods. The pterygium was separated from the cornea by shaving it off close with a cataract knife, as far as the limbus conjunctivalis; the point of a pair of small, straight scissors was inserted under the conjunctiva, along the upper edge of the pterygium, which was then cut through to its base near the plica; the lower edge was incised in the same manner. The whole growth was now thrown aside; the edges of the conjunctiva were loosened from the ball and brought together by three sutures, thus completely covering the space from which the pterygium was removed. A ligature was then thrown around the base of the pterygium and drawn tight.

The advantages in this mode of operation are, that the gap in the conjunctiva is closed, and thereby sooner unites, and that the pterygium being ligated, will slough off. Before this takes place the conjunctiva has adhered and is nearly all healed, and hence no vessels can shoot out from the base of the pterygium into the conjunctiva, which might, perhaps, cause a renewal of the disease.

Hypermetropia.

A. H. presented herself with the complaint that she could not see clearly, everything being blurred, and the eyes ache on the least use of them. She gave the history that her eyes always have troubled her, the left one never having been so good as the right. Health appears to be good; eyes, from outward appearance, seem good and healthy; on examination with Snellen's test types, the vision of the right eye was found to be $\frac{20}{xxx}$, that is, with the right eye she could make out the letters marked xxx at twenty feet distance. The left eye, examined in the same way, showed a vision of $\frac{20}{xl}$. A convex glass of forty-eight inches focus, held before the right eye, improved the vision, but still could not define the letters distinctly. Before the left eye it was necessary to place a convex glass of twelve inch focus in order to improve the vision to such a degree that the lines of xx could be seen, but not perfectly made out.

Ophthalmoscopic examination showed the fundus of each eye normal, but in both there is hypermetropia in the horizontal meridian, and myopia in the vertical meridian, with a greater degree of hypermetropia, giving a mixed astigmatism, with predominance of hypermetropia—Ahm. In the left eye the predominance of hypermetropia is much greater than in the right. By minute examination with the test glasses and types, in the right was found a hypermetropia of $\frac{1}{36}$ in the horizontal meridian, and a myopia of $\frac{1}{48}$ in the vertical, $\frac{1}{36^c} \left| \overline{-} \frac{1}{48^c} \right.$. In the left eye was found a hypermetropia of $\frac{1}{10}$ in the horizontal meridian, and a myopia of $\frac{1}{48}$ in the vertical meridian, $_{10} \left| \overline{-} \frac{1}{48^c} \right.$. With these combinations vision in each eye became $\frac{20}{xx}$.

PENNSYLVANIA HOSPITAL.

Medical Clinic of J. M. DaCosta, M. D., Professor of the Practice of Medicine in the Jefferson Medical College.

[REPORTED BY RALPH M. TOWNSEND, M. D.]

December 30th, 1872.

Three Cases of Syphilitic Paralysis.

The cases of paralysis that I bring before you to-day differ from those which have engaged our attention at previous clinics; and we generally have the satisfaction, after recognizing their source, of being better able to benefit them than those arising from most other lesions.

The first case, Joseph F., aged 40 years, had chancre ten years ago. A short time afterwards he had sore throat, and his hair and eyelashes commenced to drop out. He was placed by his physician on specific treatment, and slowly convalesced. He remained well for nine years, until last March, when he was suddenly seized with paralysis of the left arm, leg, and side of the face. This paralysis was attended with partial loss of consciousness. He entered the hospital, July 23d, and remained until Aug. 8th, somewhat improving during his stay. He then returned home, but had only been there a few weeks when he was again seized with symptoms of apoplexy, nearly all consciousness and power of motion being gone. He slowly recovered from the attack, and re-entered the hospital, Oct. 21st.

He was ordered

℞—Hydrarg. chlor. corros, gr. 1-24.
Potassii iodidi, grs. v.
Syrup. sarsap. comp,
Inf. gentian, aa ʒj. M.
S. The above quantity *t. d.*

On examination his urine is found to be acid, s. g. 1030; contains no albumen. In walking the patient swings his left leg, and the grasp of his left hand is very weak. He moves his left hand up to his head far less readily than his right. There is considerable atrophy of

the left arm. The battery test shows muscular contraction good on the affected side, and sensibility slightly increased.

Facial palsy exists only in light degree, the mouth being slightly drawn to the right side, as is apparent when he attempts to whistle. His pupils are small and react sluggishly to light. He has no disease of heart or kidneys. He has no headache, no giddiness, no loss of appetite, no sleeplessness, and his nutrition is well kept up except in his arm.

How do we know that this hemiplegia is syphilitic; and how do we know that palsy in a syphilitic man is due to syphilis?

Look at this man. He is still vigorous and healthy, and but verging on middle life. He has led a healthy life, has not been overworked, has had no mental trouble. Again, his symptoms came on suddenly and he got well rapidly to have something like a second attack. This is common in syphilitic hemiplegia. One of the striking elements of paralysis due to syphilis is, that where it affects the muscles of the face it does not do so for a long time, the facial palsy mostly passes of with extreme rapidity. We have these points then, outside of our patient's history, to stamp his disease.

Case 2. W. W., aged 27 years, admitted Nov. 27th, is a sailor; his family are healthy, and previous to the present attack the patient has been so. He contracted a chancre in the latter part of September. About Oct. 15th he was seized with pains in the left side of his neck, followed in a week by nocturnal frontal headache, and a short attack of sore throat. During the last week of October the left side of his face became paralyzed. For a week past he has been troubled with tenacious phlegm in his throat.

He has had a slight eruption on the scalp, and his hair has been falling out for six weeks. He has never had any eruption on any other part of his body. On admission, he complained of a sensation of numbness in the left side of his face and of frontal headache at night.

Present examination reveals no paralysis of any part of the body except the face. He still feels numb on the left side of his face. He has no affection of his legs or arms; walks well; has no giddiness; no supra or infra-orbital pain on pressure; no pain on pressure at the angle of the jaw; and his tongue, coated, does not deflect when protruded. Formerly, when told to hold his eyelids tightly shut, the right was much more easily drawn up than the left; but to-day the paralysis of left lid is hardly apparent, or at all events, is exceedingly small compared with the remaining facial paralysis. When he tries to whistle the mouth is drawn to one side.

Tested with the battery the right facial muscles are found to act with great readiness. On the left side the angle of the mouth is not lifted by the current, and although the masseter contracts, the muscles generally do not contract with anything like the same readiness as they do on the right. The current is felt more on the right than the left side; electro-motor sensibility is therefore seriously impaired, although not abolished, on the left side.

This man's urine on admission was acid; s. g. 1035; heavily loaded with urates, but contained no albumen.

He is taking one twenty-fourth of a grain of the corrosive chloride of mercury, along with five grains of the iodide of potassium, three times daily. He has ordinary diet and an occasional purge. If he bears this prescription well, in three or four days we will double it. He has no disease of the heart or kidney.

Case 3. J. L. M., aged 25 years, a shoemaker, admitted Nov. 5th, comes from a healthy family. One of his sisters died of consumption. With the exception of his present ailment he has always been healthy. He had chancre a year ago, followed two weeks afterwards by sore throat which lasted a month. He has never had iritis or pain in his shins. Six months ago he had an attack of frontal headache. During July he did not feel well, although he was not positively sick.

About the first of August he breakfasted as usual, and then went up stairs to lie down. Upon getting up from his bed he fell upon the floor, completely paralyzed on the right side, and with his power of speech gone. His aphasia was complete until about three weeks ago, since which his speech has been improving. His paralysis is also less complete than it was, but it is still marked.

Present examination shows his tongue, when protruded, drawn slightly to the left, as are his mouth and nose. His speech is halting, thick, and mumbling. There is no falling of either eyelid. The pupils are rather large and react to light, and there is no appreciable difference in their size. Both sight and hearing are unimpaired. When he walks he throws his right leg, and he cannot well lift up his right arm.

Tested by the battery electro-muscular sensibility is found equally acute on both sides, but the muscles do not contract quite as readily on the paralyzed side. His urine is acid, s. g. 1008; contains no albumen. His temperature averages 98.5° F. His pulse varies between 86 and 100. His heart is healthy. He is taking the one twenty-fourth of a grain of the corrosive chloride of mercury and five grains of the iodide of potassium, dissolved in compound syrup of sarsaparilla and infusion of gentian. His bowels are kept open, and his diet is nourishing.

Looking connectedly at these cases we are struck with the age; they are all young men. In this respect syphilitic paralysis has a history of its own. It attacks the comparatively young. Other palsies are prone to happen after middle life.

Secondly, the cases all agree in their sudden coming on. In this respect we have differences, the paralysis at times being of gradual origin.

There are two or three distinct causes which give rise to distinct groups of syphilitic hemi-

plegia. The first is where a distinct syphilitic tumor (gumma) forms in the brain. This is not infrequent. Its presence gives rise to great pain in the head, and from its pressure on some certain portion of the brain or nerve origin, we may have a local palsy, or deafness of one ear, or blindness of one eye. The headache is constant, and when the tumor is seated superficially, or in the meninges of the brain, there is a tendency to convulsions, frequently repeated. In these cases the palsy is apt to happen gradually.

Another condition presents spots of localized softening which ultimately give rise to small apoplexies. I had such a case in a young man with constitutional syphilis from infecting chancre. He had frequent attacks of vertigo. One night he was brought home from the opera with thick speech and hemiplegia. What had happened? The softened part of his brain had given way, or an apoplectic clot had formed in this previously softened spot.

A final condition is where we have plugging of the arteries of the brain. This constitutes a very interesting class. It happens thus. We know that syphilis is apt to seize upon the vascular system. It attacks the vessels of the brain, roughens their coats, arrests the circulation, a clot forms, and plugging takes place. In both the latter classes paralysis comes on suddenly.

Have I reason to think, in any of the cases that we have had before us, a tumor caused the trouble? Distinctly not! All these cases have been marked by the absence of vertigo, or steady headache, so significant of cerebral tumor. Again, none of them have had convulsions, and in most cases of tumor we have convulsions as a prominent symptom. In cases one and three, emboli or clots were most likely the cause of the sudden attack. In case two, the diagnosis is more difficult. Here, on the right side of the face, we had marked anæsthesia, inability to raise the corner of the mouth, and slight paralysis of the upper eyelid. We might suppose that branches of the fifth were the only affected, it being a mixed nerve, conferring sensation on the tongue, cheek, and angle of the mouth, and giving motor power to the muscles of mastication. But the sensibility of the tongue remains intact on either side, and the paralyzed muscles, notably the *levator anguli oris*, the *orbicularis*, and the *levator palpebræ superioris*, receive their motor power from the seventh (portio dura) and the third (motor oculi) nerves, respectively. We must assume, therefore, as the most likely solution of this case, that we have had some exudation of a syphilitic character, in the neighborhood of the pons Varolii, pressing the origins of the affected nerves.

All these cases are improving under treatment, and the prognosis of all is not unfavorable. In those in which actual rupture preceded the marked attacks of palsy that happened, the prognosis is less favorable.

Gray Hepatization of the Lung—Post-Mortem Appearance.

The man came in the hospital only to die, as he was admitted in a moribund condition and perished in twenty-four hours. Briefly, this is his history. David W., aged 43 years, was brought to the hospital Nov. 12th. On admission the pulse and respirations were very rapid, hands blue, great dyspnœa, and acute pain when the upper part of the left chest was touched. He was so very sick, and in such great pain that it was impracticable to make a thorough physical examination. There was dullness on percussion over the left lung anteriorly for five inches below the clavicle; and bronchial respiration over the same extent of space. Friction sounds were also heard. Harsh respiration, with some dullness on percussion, existed over portion of the right lung posteriorly. He was ordered one-half a grain of digitalis, one-eighth of a grain of the watery extract of opium, and one grain of the sulphate of quinine, every three hours. He also had a hot flaxseed poultice applied to the chest and was given milk punch. His pulse in the evening was 148, respiration 46, temperature 102° F.; and his urine was alkaline and albuminous, with a s. g. of 1024. The next day he was much worse, pulse 140, respirations 24 and very labored. His pill was stopped and he was ordered whiskey, ℥j every half hour; ten grains of the carbonate of ammonia every two hours; and two grains of the sulphate of quinine every two hours. He died the same afternoon.

Post-mortem. The left apex of the lung shows gray hepatization, the so-called third stage of pneumonia. The right lung is simply congested, but shows a much darker color than the other side, so that, unless we were aware of the morbid anatomy, we would take the right lung to be the one with the most serious marks of disease. The left lung is solid, not crepitating, and a section of it sinks when thrown into water. A similar section of the right lung floats. This is the actual test of disease, no matter what may be the visual appearance.

What is the exact morbid process here? The coloring matter is very much changed, absorbed. Another peculiarity consists in the granular degeneration of the exudation that has taken place. It is a current belief that pus is the product of the third stage of pneumonia; this is not always the case, as we may have a granular or fatty degeneration, as in the present case, without the formation of pus. This hepatized lung is easily torn. The next question that occurs to us is, could a person recover with such a condition of lung? Recovery from such a state is very doubtful, especially if much of the lung be involved. Pain was a curious clinical feature of this case. There was some plastic exudation posteriorly, but not much anteriorly, where the patient complained so much. There are some cases of pneumonia where chest pain is a prominent symptom; an hyperæsthesia, in fact, of the cutaneous surface over the lung.

Editorial Department.

Periscope.

Belladonna in Ophthalmia.

Mr. Henry Power writes to the *Practitioner:*—

The following is a *résumé* of one of the cases that has recently been under my care, showing the benefit that may be derived from the use of the extract of belladonna in obstinate phlyctenular ophthalmia:—

M. C., æt. 4, was brought to me in the beginning of January of the present year. She had had measles (not an unusually severe attack) in August, 1871; this was followed by stoppage in the nostrils and herpetic eruption on the lip and on the right ear. At the end of August her mother took her to Yarmouth for a month. She was ailing all the time she staid there, complaining of thirst, with restlessness at night, languor, and loss of appetite. These symptoms continued up to November, when the right eye became affected. She was taken to an ophthalmic hospital, when some tonic medicine was ordered for her, and a poultice was directed to be applied. A crop of pustules appeared over the brow, temple, and cheek, and the left eye became affected. I then saw her, and found that she was suffering from a well-marked attack of phlyctenular ophthalmia. On examining the eyes several pustules were visible on the conjunctiva at the margin of each cornea, whilst superficial abrasions or ulcers were apparent on the corneæ themselves, the right being much the more severely affected, so that a large part of its surface was cloudy. She was ordered a purge, and a powder containing three grains of hydrargyrum c. cretâ with one of quinine, thrice daily. A four-grain solution of atropine was dropped in, and a lotion of extract of belladonna given to take home, and to be used frequently. But little improvement resulted, though the mercury and quinine were continued for a fortnight. The bowels being somewhat disordered, and the lips and ala nasi having some pustules upon them, it was thought likely that there were worms. Another purge of compound jalap powder and a turpentine injection were therefore ordered. No worms, however, were observed in the motions; cod-liver oil was now prescribed, and after a short time a little steel wine was added to it. The use of the belladonna lotion was continued. This plan was persevered in for a month, with little benefit, the child sometimes opening the eyes in the evening and playing about, but always coming to me in the morning with intense photophobia. The mother was exceedingly intelligent, and assured me that the bowels were regular, the motions natural, and that the food given to the child was carefully selected, wholesome in quality, and though its appetite was variable, yet, upon the whole, the quantity was sufficient for its needs. Calomel powder was now applied directly to the cornea for several days, but ineffectually, so far as the relief of the photophobia was concerned.

Finding that the symptoms were stationary, I now determined to tap both eyes with a broad needle, and allow the aqueous humour to escape. The benefit was considerable, the child opening the eyes on the following days for some hours, and I thought recovery would take place without further trouble. However, a relapse soon took place, and she was now placed upon one-sixth of a grain of good extract of belladonna three times a day. In two days the mother brought her to me obviously greatly improved. The intolerance of light had greatly diminished, and she even saw to pick up a pin on the carpet. She continued the use of the extract for a fortnight, when it was given up, and some quinine mixture ordered. A few days later she went into the country. This child has lately been seen by me, looking fresh and rosy, with only slight nebulæ on the corneæ of both eyes, but able to bear strong light perfectly; and I can feel no hesitation in attributing the improvement here observed to the internal use of the belladonna, it was so immediate and proved so persistent.

Ætiology and Therapeutics of Miasmatic Pyæmia.

M. Hüter, as quoted in *The Practitioner*, divides pyæmic affections into two chief forms; pyæmia simplex, which is a pyæmic fever occasioned by direct or indirect infection with pure pus; and pyæmia multiplex (metastatic pyæmia), occasioned by septic infection of thrombus, proceeding from the wound, and multiple collections of matter proceeding from the latter. The causes of pyæmia multiplex are divisible into the indirect, or those favoring the extension and multiplication of thromboses; and the direct, producing the softening or septic infection of thromboses. The production of thromboses is favored by general and local disturbances of the circulation, producing lowering of the arterial pressure and prolongation of the stasis of the circulation throughout the whole nervous system, or in special veins; to the former belong old age, bad food, loss of blood, traumatic fever, intercurrent febrile diseases; to the latter, local disturbances of nutrition, ligature, compressions of veins in consequence of inflammation. The softening of thrombi produces every kind of phlebitis. The septic infection of thrombi is partly chemical, and due to decomposing muscle and connective tissue; and partly animal, due to monads (microsporon

septicum of Klebs). The latter develop in large numbers in the form of very small round corpuscles in decomposing blood, pus, and urine, in which they live as long as the fluid contains oxygen. In putrifying muscle or connecting tissue water they speedily die, and are replaced by the larger staff-shaped nuclei. The monads produce locally diphtheritic inflammation and septic phlegmons. They enter the circulation in large numbers, producing erysipelas or diphtheritic inflammation of the subcutaneous connective tissue, septic infection of thrombi, and secondary pyæmic embolia. The vibrios only produce local putrefaction. They do not, on account of their size, and their relation to pure oxygen, gain entrance into the circulation. Pyæmia multiplex never arises from simple embolia, nor from infected thrombi, and they cannot therefore be characterized as embolia; nevertheless, all infectious traumatic diseases do not depend on the entrance of fungi. Septicæmia originates for the most part, in intoxication with chemical putrid poisons; whilst the diphtheritic affections are produced by monads. Collections of matter may also be produced by mechanical or chemical lesions. Metastatic disease, especially of the lungs, very probably arises from the entrance of emboli permeated with monads into the branches of the pulmonary artery, as well as by simple migration of monads (Klebs). The latter, perhaps, is the means by which the pyæmic inflammation of the joints and serous membranes arise. The treatment of metastatic pyæmia is, therefore, essentially prophylactic; the loss of blood in operations should be carefully avoided. The incisions should be clean and sure, and all contusions of the tissues by the ligature or écraseur should be avoided. The surface of the wound should be cleansed by irrigation with disinfecting fluid, as by Condy's liquid; carbolic acid dressing should be applied, and care should be taken that no secondary hemorrhage occurs. The pus produced should be allowed to flow away freely by means of drainage tubes. Abscesses should be opened early, tight bandages removed, gangrenous tissues should be cut away, and diphtheritic surfaces should be cleansed by cauterization, as by the actual cautery, or by concentrated carbolic acid; in erysipelas and lymphangitis inunctions of pix liquida may be employed, with steady pyæmic treatment of the fever, and prevention of abscesses as far as practicable.

Large Doses of Camphor and their Effect.

The following case is reported, among others, by Dr. John Harley, in the *Practitioner:*—

Henry A., aged 17, a strong, active young man, troubled with seminal emissions twice a week, and the usual nervous symptoms. He was greatly relieved by hemlock, ʒvj of good succus producing moderate cicutisms. After an interval of some months he again applied to me, and this time I prescribed camphor. He took two doses of four grains each; after an interval of a week, seven doses of five grains each, on consecutive days; and for the next six days, five grains night and morning. The following week he took ten grains every morning before breakfast, and I then increased the dose to fifteen grains, which was taken every other morning for a week longer. During the next two months he took a dose of camphor, progressively increased from eighteen to thirty grains, at intervals of two or three days; and for four consecutive days during the latter part of the time he took thirty grains night and morning. The effect on the irritation of the sexual organs was marked, emission occurring only once a fortnight during the time the camphor was taken. No dose less than fifteen grains produced any appreciable effect. When this quantity was taken before breakfast, it caused giddiness after fifteen minutes, disappearing in the same interval of time. Giddiness lasting a quarter of an hour, and a warmth of stomach "as if he had taken spirits," followed doses of twenty grains. The following observations show the effect of twenty-five, thirty, and thirty-five grains respectively:—

Twenty-five grains of camphor were taken when the pulse after walking was 79, the pupils $\frac{1}{5}''$, and the tongue clean. After twenty minutes there was giddiness, but the patient did not show it, and a warmth about the chest; the pulse 76. The giddiness lasted half an hour. After two hours the pulse was 73, regular, and of its usual volume and power; the pupils and tongue were unchanged throughout, and although he had been sitting still in a darkish room during the whole of the time, there was no somnolency.

Thirty grains of camphor were taken when the pulse, after a walk, was 88, full, and regular. The usual giddiness came on after a quarter of an hour, and continued for half an hour; to me it was not appreciable. After thirty-five minutes the pulse was 76, and had returned to its usual volume and force for a state of quietude; a diffused feeling of warmth throughout the body, but especially behind the sternum. After an hour and three-quarters the pulse had risen to 86, but was otherwise unchanged; the other symptoms had passed off, and there was no somnolency.

Thirty-five grains of camphor were taken after a walk, when the pulse was 86, and the pupils $\frac{1}{7}''$. Giddiness "over the back and top of the eyes" came on in a quarter of an hour, and continued at its maximum for twenty minutes. There was no default of vision. After thirty-five minutes the pulse was 76 full, and bounding; the cheeks hot and flushed, and there was a little somnolency; no change of pupils or tongue, and a sensation of warmth over the upper part of the chest. After two hours the pulse was 76, regular, and of its usual force and volume; the somnolency and flushing were gone, but he still felt heavy about the eyes. He now walked home, and experienced slight giddiness on reaching home, lasting half an hour.

No greater effects were produced when thirty grains were taken twice a day.

The urine was examined after the operation of the medicine on each of these occasions; it was always normal in quantity and composition, and it possessed its natural odor, being entirely free from that of camphor; nor was the odor of camphor in the least degree appreciable in the cutaneous or pulmonary exhalations of either patient. The respiration was not affected to any appreciable extent in either case.

Reviews and BookNotices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Brown-Sequard proposes soon to begin, with the assistance of his friend, Dr. E. C. Seguin, and several New York, Boston, and Philadelphia physicians and surgeons, the publication of a new medical journal, under the title, *Archives of Scientific and Practical Medicine.*

The original papers in this periodical will form the largest part of every number, and will treat successively of the most various subjects belonging to all the branches of the medical sciences.

This journal will appear on the first day of every month, each number consisting of about one hundred pages, 8vo, in somewhat small type. Price $4.00 per year.

BOOK NOTICES.

The Microscope and Microscopical Technology. A Text Book for Physicians and Students. By Dr. Heinrich Frey, Professor of Medicine in Zurich. Translated from the German and edited by George R. Cutter, M. D. Illustrated by 343 engravings on wood, and containing the price-lists of the principal microscope makers of Europe and America. From the Fourth and last German edition. New York: William Wood & Co., 1872. 1 vol., cloth, 8vo. pp. 658.

With the increased attention to histology, and the minute study of the secretions, a knowledge of the microscope, extending to a practical familiarity with its construction, mode of employment, and revelations, has of late years become indispensable to the intelligent practitioner. The volume before us is intended to give all that the student or physician is required to know in order to employ with success this most valuable adjunct to his studies. In Germany it has met with a rapid success, which in itself is a strong endorsement of its character.

It is divided into twenty-two sections, commencing with the theory of the microscope, and full descriptions of the various kinds employed for scientific purposes. Several sections are then devoted to the preparation of objects, the reagents used, the processes of staining, impregnating, injecting, drying and freezing objects for the purpose of examination, and their mounting and arrangement. A thorough acquaintance with these technical details is essential to success in the use of the instruments, and the instruction concerning them is given in clear language, well illustrated by the engravings.

The remainder of the volume is occupied with detailed descriptions of the appearance, both in health and disease, of the more important constituents of the body, the secretions, the bones, muscles, nerves, and organs, the connective tissue and cartilage. Equal attention is given to pathology and physiology, the author observing in his introduction, that there is no wide abyss between health and disease, as once was thought, but that the processes of disease are but modifications of those which occur in the normal condition.

The treatment of individnal topics embraces the most recent results of investigations. The exposition of the histology of the nerves in Section Fifteenth, for example, is a masterly summary of the labors in this difficult field. We are not only told what results have been obtained, but the processes to attain these results are fully described, so that any one is enabled to repeat the experiments to his own satisfaction. In some instances fuller details would be welcome. For instance, the study of the metamorphosis of the ordinary epithelial cells of the seminiferous canals into spermatozoa, mentioned on page 559, is too meagerly stated to allow of repetition.

The translation, though here and there a little cumbrous, is on the whole very successful. The technical terms are clearly rendered, which is not always easy where there are so many novel ones, as in German micrography. The illustrations are abundant and well printed, while the paper and binding are exceptionally good for a medical work. A well-prepared index is added, and the price-lists of microscopic apparatus, which closes the volume, adds to its practical utility.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, DEC. 14, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE REGISTRATION REPORT OF MICHIGAN.

One of the objects which we have sought to accomplish through the medium of this journal, has been to impress upon the medical profession, and through them on the public officers and people of the United States, a proper appreciation of the importance of accurately kept vital statistics. We have had the pleasure of witnessing from year to year more and more attention bestowed upon this pregnant branch of scientific inquiry, and we have always felt a gratification in bringing to general notice the labors of students in these little understood researches.

One of the most admirable contributions to this subject which we have read, is the Fourth Annual Report, of the Secretary of State, the Hon. DANIEL STRIKER, of the State of Michigan, relating to the registry and return of births, marriages, and deaths, for the year 1870, which has just been issued. The Secretary, in his introductory remarks, very freely gives the credit of the discussion of the numerous statistics it contains to Dr. H. B. BAKER, a well-known member of the State Medical Society, and a statistician of recognized skill.

The thoroughness with which Dr. BAKER has performed this tedious and, as far as the public is concerned, thankless task, can best be illustrated by selecting a few of the many striking results which he has obtained, and judicious suggestions he has made, from a consideration of the tables placed in his hands.

On pages 7-9, the question of the relation of marriage at certain seasons to the birth rate is discussed. The facts seem to show that although in certain months marriages are more frequent, conceptions are not correspondingly frequent. The study of marriages in relation to births in this connection is novel and important. For as Dr. BAKER observes, if it be ascertained that for physiological reasons it will conduce much more to the health and happiness of the parties concerned if marriages or births occur at certain seasons of the year, the slight considerations which are now allowed to control these events may be overborne by that knowledge, and a greater degree of health and happiness result.

The much debated point as to whether native American couples are less fecund than foreign born couples, is entered upon with temperance and caution. There is an absence of that anxiety to make a sensational exhibit which we have noted elsewhere. Statistics, he considers, are yet inadequate to answer decisively. But meanwhile it must be kept in mind that mere multiplication is not replenishment; that because American couples have fewer children they do not necessarily contribute less to the population; that the undoubted superior viability of their children is unquestionably largely owing to their limited numbers; that length of life must be counted as well as the mere fact of birth, etc. Entirely approving, as we do, on physiological, social, and moral grounds, the limitation of families by proper methods, we earnestly commend to those of

a different way of thinking the thoughts which flow from a study of these factors and influences.

The theories which have been framed in order to explain the diversity of sex in children are many and curious, but as a rule lack verisimilitude. Dr. BAKER directs attention to the fact that no very thorough attempt has been made to group together the evidences contained in statistics of births, marriages, and deaths, which bear directly and indirectly on this subject. He inaugurates an attempt in this direction, very suggestive even within the limits to which he carries it. It is a fair inference from his tables that causes tending to increase the birth rate tend also to increase the proportion of female offspring, this being of course equivalent to decreasing the proportion of males. This, it occurs to us, is rather in favor of Thierry's well-known law of sex production (namely, that the sooner conception follows ovulation, the greater the probability of the fetus becoming a female), for certainly the birth rate would be increased by an increased liability to conception, and this in turn is augmented by the sooner coitus follows the escape of the ovum from the ovary.

Passing many other points of almost equal interest, the observations of Dr. BAKER on the Expectation of Life in insurance are especially noteworthy. He shows that the present tables are defective in several respects, and indeed, that they are based on a false premise altogether. His arguments on this question (pages 169--183) deserve the most serious consideration from all interested in any way in Life Insurance. In his opinion the true average expectation of life at any given age, is the age at which one half the number living at that age shall have died. The difference between this and the ordinary formula is considerable. By the "American Experience Table" the expectation of life at the age of ten years is 48.72 years; by Dr. BAKER'S formula it is 54.65 years.

The results of the compilations are exhibited to the eye in a series of lithographic diagrams, which facilitate much the ease of following the discussions of the tables.

While we have said enough to show the uncommonly suggestive character of Dr. BAKER'S deductions from his materials, we have by no means exhausted or even indicated the full extent of his stores. We prefer the reader should satisfy his interest in such matters by reference to the original volume itself.

ON POPULAR MEDICINE.

The position which thinking men have long assumed with reference to popular works on the various branches of medical science has been one entirely favorable to them, whenever they were written by able regular physicians, and with that skill in the treatment of such subjects which is demanded to present them felicitously to the general mind. The more eminent a physician becomes in a branch of his art, the more desirous should he be to see just views regarding it disseminated among his fellow beings.

On no subject is there a more general interest than on that embraced in the studies of the physician. The preservation of life and the maintenance of health are of the weightiest moment to all intelligent men and women, and on none do they more ardently seek information. The curiosity to know something of the machinery of the body and its leading functions is a legitimate one, conducting to beneficial results, and ought to be encouraged, and, as far as we are able, gratified. We go so far as to recognize no line of demarcation, and we do not say dogmatically to the public about science, as in the days of old, theologians said to anatomists and other investigators: "Hitherto shalt thou come, but no further." Physicians, freed at length from the shackles of theological narrowness, adopt it themselves in turn, and often attack and abuse the man who would throw science at once open to the multitude.

The reason of this is said by them to be that the morals of the people will be contaminated by the study of certain branches of medicine, especially obstetrics, venereal diseases, and complaints of the generative organs, as well as the physiology of those functions. That they themselves experienced any moral debasement when they commenced to study these branches they do not concede; but that all others will, they do not doubt. It is, in other words, the old, narrow, dogmatic, egotistic, superannuated spirit which forced Vesalius to perish miserably because he had dared to make a *post-mortem*, and which, for so many centuries, shut off all investigation of science to the inquiring mind. It is time this twaddle about morals being injured by increased intelligence should cease.

We have been led to these thoughts by glancing over some of the admirable series of "*Illustrated Health Books*, published by Mr. J. J. Weber, of Leipzig. Their full title is *Illustrirte Gesundheitsbucher. Belehrungen uber den Gesunden und Kranken Menschen und die vernunftgemasse Pflege desselben.* Each of them is a small octavo of 150 or 200 pages, and there are twenty in the series (not all yet published). They are written each by some eminent specialist in the particular branch treated of, and the subject is discussed in an easy, plain, and popular manner, but with abundant thoroughness. Among those which have already appeared we have examined with especial interest the one on "The Lungs," by Dr. PAUL NIEMEYER, of Magdeburg, and that on "Diseases of Women," by the eminent aulic counsellor, Dr. ROBERT FLECHSIG, of Elster. They are both written in the most satisfactory manner, and though we might criticise here and there some scientific views, we have been throughout pleased with the propriety of expressions and illustrations, the judicious tone used, and the value of the hygienic information conveyed.

Among the other writers whose names appear as authors in this series we may note the distinguished Dr. KLENCKE, of Hanover, who has done so much in this field, and who contributes the book on "The Teeth;" Dr. JULIUS VOGEL, of the Pathological Institute of Halle, who treats of "Corpulence;" Dr. E. L. MERKEL, of the Policlinic of Leipzig, to whom has been entrusted the volume on the Larynx; and others of equally well-recognized ability.

While this series is an excellent one, it is better adapted for imitation than translation. There is a fine field open in this country to the energetic publisher who would produce a similar series adapted to the wants of our people, and have that prepared by men in this country, already well known for their successful study of special branches. We have many such, though but few who have the tact to write of their branches in the proper manner to instruct, without being either too deep, too dry, or too superficial.

Our really first-class writers on popular medicine, those who have proven themselves so, might be numbered on the fingers, and it would not require the whole ten either. The result of it is that the medical works most frequently seen, simply for default of better ones, in the hands of laymen, are by notorious, half-educated, self-seeking, irregular doctors, who always aim to make them a vehicle to ride into a practice which otherwise they could not get. The day of something better is delayed by nobody but the profession itself.

ERRATA.

In the Report of Dr. DA COSTA'S Clinic, published Nov. 30th, 1872, on page 477, the last line but one of the case of Hemiplegia with Aphasia should read—"and where the possibility of embolism *does not* exist."

Page 478, case of Uræmic Coma, six lines from top, read "five minims of muriatic acid every four hours," instead of three times daily.

Notes and Comments.

How to Save Money.

We desire to call our subscribers' attention to the fact that our terms remain:

Medical and Surgical Reporter	$5 00
Half Yearly Compendium	3 00
Physicians' Pocket Record	1 50

payable always *in advance;* but when more than one of these publications are taken, we allow a notable discount as follows:

Reporter and Compendium	$7 00
Reporter and Pocket Record	6 25
Reporter, Compendium, and Pocket Record	8 25

But these low rates can only be given when the remittance is made *in advance* direct to our office. An early remittance, therefore, will effect a saving well worth making.

The cost of the Pocket Record is slightly increased over last year, owing to increased cost of manufacture. As a general preference has been expressed for the smaller size (35 patients), we have omitted the manufacture of the larger size (70 patients).

Castration of the Human Female.

Our old friend, Dr. William A. Tatem, of Delaware, in a letter to us, describes a case equal to the famous one of the sow-spayer who removed his daughter's ovaries, given by Bœrhaave. Dr. Tatem says:—

"Early in the present century a man living in Gloucester county, New Jersey, was well known in that region as a castrator and spayer of domestic animals, and about the year 1813 performed the latter operation on his wife, giving as a reason that she must not have any more children. If memory serves me right, the incision was made in one side, and both ovaries removed through the aperture. The woman became very ill, and Dr. Ayers, then living in Woodbury, was called to attend her.

"A few weeks since I wrote to my old friend, with whom I commenced the study of medicine, Dr. Joseph Fithian, requesting him to give me what information he could about the fact. He replied that in 1815, when he came to reside in Woodbury to practice, he heard the case spoken of, and credit given Dr. Ayers for preserving the life of the woman, and saving the man from punishment."

The Hereditary Influence of Drunkenness.

Dr. Mitchell, Commissioner of Lunacy for Scotland, as we learn from the *Journal of Mental Science*, October, 1872, gave the following testimony before the House of Commons:—

Have you paid any attention to the hereditary influence of drunkenness or excessive drinking? Yes; and I think it quite certain that children of habitual drunkards are, in a larger proportion, idiotic, are, in a larger proportion themselves habitual drunkards, and are, in a larger proportion, liable to acquired insanity, that is, the insanity which comes on in later life, than are the children of other people. But this should be kept in view, that many habitual drunkards are also predisposed to insanity; the excessive drinking in them is itself the form which the insanity takes, and what they transmit to their children is really that disposition to insanity which they had themselves, and which may find expression in the children in idiocy, insanity, or crime.

The Cure of Inebriety.

A circular of the Pennsylvania Sanitarium, at Media, gives the following statistics of 126 cases from Philadelphia received by it:—

In 1867 thirteen were admitted, of whom six clerks, two merchants, and one mechanic, have been restored, and continued to be useful citizens during four years.

In 1868 twenty-two were admitted, of whom five clerks, two merchants, one lawyer, one mechanic, and one agent, have given three years' evidence of usefulness.

In 1869 twenty-three were admitted, of whom four clerks, one merchant, one mechanic, two actors, one agent, and one lawyer, have done well for two consecutive years.

In 1870 twenty-three were admitted, of whom eight clerks and three merchants have given evidence of stability for one year.

In 1871 twenty-eight were admitted, of whom five clerks, two merchants, one physician, one constable, one manufacturer, one publisher, and one mechanic, have stood firm since their return to their families and occupations.

In 1872 seventeen have thus far been admitted, of whom six have left with a good prospect of continuing in well doing.

A summary of this statement shows nine who have maintained their sobriety for four

years, eleven for three years, ten for two years, eleven for one year, and eighteen for less than one year. It is proper to observe, however, that four of the whole number have died since they left the Institution, three of consumption, and one of fever.

Correspondence.

Notes of a Case of Remarkable Longevity.

Eds. Med. and Surg. Reporter:

I send you some notes of a remarkable and undoubted instance of longevity. John Phillips, the subject of this record lived to the uncommon age of 104 years, 7 months, and 26 days. He was born in Sturbridge, Massachusetts, on the 29th day of September, 1760, and died February 25th, 1865. He lived and died on the farm where he was born. I knew him well, from my early boyhood to his death, during a period of nearly forty years, and in my earliest recollection of him, was wont to regard him as a very old man. He was compactly built, of large size, long body, short extremities, and stout muscular development. At the age of 16 he weighed 196 pounds, and stood six feet in his stockings. His weight, subsequently, varied from 166 to 204. His organization was not a fine one, the bilious temperament predominating, yet well and evenly developed in muscle, bone, nerve, and blood; with tough, hardy and enduring qualities of constitution. He had a large nose, prominent cheek bones, light complexion, a full brow, and a broad, long chin. He was a man of stability, steadiness, practical judgment, and good common sense, and rarely gave way to passion or rash impulse. He always lived plain and frugal; was temperate in eating, drinking, working, and in all things. He labored as a farmer constantly, but not very laboriously, or to late hours. He usually retired to bed early, and rose early in the morning. His beverages were cold water, tea, coffee, and cider. From his youth to upwards of 50 he smoked and chewed tobacco, and, subsequently, during life, he snuffed it. He lived with his father, and his father with him, and he with a son. Their families ever lived together, and ate at the same table. He was married at the age of 25, and lived with his wife 64 years, and by her, during a period of 26 years, had nine children, seven of whom grew to have families, and five were living at the time of his death, the oldest 78 years, and their united ages 336. He left 30 grandchildren, 38 great grandchildren, and one great great grandchild.

He retained his physical powers remarkably as great age came upon him. When nearly 90, he was accustomed to labor nearly all day in the field during harvesting, mowing with great ease and celerity a large part of it. This he continued to do more or less till he was 96. When upwards of 90, he laid up and relaid on his farm, alone, about twenty rods of stone wall, working four or five hours daily, and making about two rods per day. He never had a severe fit of sickness, after he was 14 years of age, till his last, and for nearly fifty years previous to this had not called upon a physician. His one hundredth birthday was suitably celebrated by his family and friends in his native town. In the presence of a large congregation assembled at church, he opened the exercises with suitable remarks and appropriate prayer, delivered in a clear and forcible manner. On the second election of President Lincoln, he went to the polls and cast his vote, at which time he was 104 years and 4 months old. Mr. Lincoln, hearing of this act, sent him a congratulatory letter, the original of which now lays before me. He had voted at every Presidential election since the adoption of the United States Constitution, with the exception of that of 1860.

I saw him a few weeks before his death, and made the following record of his physical condition: "He weighs about 200 pounds; his face is nearly free from wrinkles; his hearing and sight comparatively little impaired; his general health good, and all his bodily functions well performed except that of locomotion; he is considerably bent over, and seldom goes out of doors; his mind still retains much of its original strength and vigor; his recollection is remarkably retentive of events that occurred from his early boyhood to within ten or twelve years, so that his mind sweeps over a period of more than eighty years; he converses intelligently, and takes a lively interest in the political affairs of the country; he is thoroughly interested in the war, understands the geography of the Southern States, watches closely the movements of our army and navy, and fully appreciates our successes; he feels anxious to live to see the war over, and once more a peaceful and united country. In the family of which he forms a part, consisting of seven persons, are four generations."

He grew fleshy during the last four years of his life. He was not confined to his house till within a few weeks of his death, which was occasioned by an attack of influenza, which terminated fatally in six days.

Timothy Newell, M. D.

Providence, R. I., Dec. 2, 1872.

News and Miscellany.

The United States Army in 1871.

The President's Message says, the annual average mean strength of the army was 24,101 white and 2494 colored soldiers. The total deaths for the year reported were 367 white and 54 colored. The distribution of the medical and surgical history of the war is yet to be ordered by Congress. There exists an absolute necessity for a medical corps of the full number established by the act of Congress of July 28, 1866, there being now 59 vacancies, and the number of successful candidates rarely exceeds eight or ten in any one year.

District Medical Society of the County of Mercer, New Jersey.

The society met at Trenton on Tuesday, December 3d, with a good attendance. As has got to be too much a habit of late in that society, neither of the essayists were present, which detracted much from the interest and profit of the meeting.

Dr. Meeser, of Titusville, related a case of traumatic tetanus, followed by recovery.

Dr. J. B. Coleman announced the death of Dr. Edmund Hance, formerly President of the society, and offered the following:

Resolved, That the District Medical Society of Mercer county have heard with regret of the death of Dr. Edmund Hance, their old associate and former President; and as a mark of the high esteem with which the deceased was regarded by them, be it further

Resolved, That the members of the society attend the funeral of the deceased to-morrow, at 10 o'clock A. M., at the State Street M. E. Church. Adopted.

Drs. Meeser and Warman were appointed Essayists for next meeting.

The Plea of Insanity.

A bill has been introduced into the Indiana Legislature, which provides that in cases of homicide where the plea of insanity is set up, and the defendant is acquitted, the jury shall specify in their verdict whether the return of "not guilty" was upon that ground. If so, the maniac, who, in an instant of uncontrollable irresponsibility, slew a fellow creature, is forthwith to be consigned to a lunatic asylum, not until pronounced sane by another jury, but for life, or a term of years, according to the nature of the crime charged.

By a recent government order in France all patent medicines and cosmetics are to be subjected to careful chemical analysis, and the sale prohibited of such as are found to contain any deleterious ingredient. In America more harm is done by the perpetual ingestion of poisonous nostrums than in the whole of Europe put together. A significant admission by a newspaper!

The wife of Dr. Benjamin F. Hardy, a prominent physician of San Francisco, took chloroform recently to cure neuralgia, and died from the effects of the dose.

General Joseph Hooker is regaining his health, and is reported to have ridden on horseback a few days since, for the first time in four years.

Dr. Andrew Ottarson, successor of the late Dr. Cochran, was sworn in as Health Officer of Brooklyn December 3d.

NOTES AND QUERIES.

Theriaque.

Novice. "What do the French mean by *theriaque?*"

Reply. It is a compound preparation the virtue of which consists solely in the opium it contains. Of this drug, in its crude form, four grammes of *theriaque* contains five centigrammes.

Climatology.

Reader. "Whose work on Climatology do you consider the best?"

Reply. To those who can read German Maury's *Klimatologische Untersuchungen.* To those who cannot, the treatises of the English authors, Bennett, and Johnson.

J. S., of Phila. We saw the error, but too late. The "Comic Law" is good.

MARRIAGES.

Bullard—Smith.—On Saturday evening, Nov. 30, 1872, by the Rev. S. Gregory Lines, Pastor of St. Stephen's Church, Florence, J. Arthur Bullard, M. D., formerly of Montrose, to Miss Maggie Smith, of Philadelphia.

Cannon—Pellet.—Nov. 14th, in Papakating, N. J., by the Rev. A. Tully, Frederick M. Cannon, M. D., of Deckertown, and Charlotte E. Pellet, of Papakating.

Coburn—Graves.—In Claremont, N. H., Nov. 20th, by Rev. F. W. Towle, James M. Coburn, of Dracut, Mass., and Hattie M., daughter of Dr. L. J. Graves.

Dickson—Caldwell.—In Pittsburg, Nov. 28th, 1872, at the residence of James Caldwell, Esq., by the Rev. T. H. Hanna, Dr. John S. Dickson and Miss Sallie H. Caldwell, both of that city.

Rutledge—Hall.—Oct. 10th, 1872, by Rev. T. J. Turner, Dr. S. R. Rutledge, of Blairsville, Pa., and Miss Lide J. Hall, of Allegheny county, Pa.

Terry—Gardiner.—In this city, at the Fifth Baptist Church, December 5th, by the Rev. Warren Randolph, Mr. Arthur L. Terry, of Philadelphia, and Miss Mary Walter Gardiner, daughter of Dr. D. R. Gardiner, of Pottsville.

Weaver—Lehman.—Nov. 27th, by Rev. A. J. Weddell, at the residence of the bride's parents, Norristown, Pa., Dr. Jos. K. Weaver and Miss Amelia R. Lehman, daughter of Henry Lehman, Esq.

Wernwag—Keichline.—At the residence of the bride's parents, the third inst., by the Rev. J. W. Claxton, Wm. P. Wernwag and Mary P. Keichline, daughter of Chas. P. Keichline, M. D., all of this city.

DEATHS.

Atlee.—In this city, on the 4th inst., Louise, youngest child of Dr. Walter F., and Louise Atlee, aged 2 years.

Elliot.—In New York, Nov. 30, Ernest Frank, eldest son of Dr. Augustus G. and Lizzie A. Elliot.

Hance.—At Glassboro, N. J., November 29th, Dr. E. Hance, in the 57th year of his age.

Moore.—In Cincinnati, Nov. 26th, Dr. John K. Moore, in his 32d year.

Rogers.—At Chicago, on the 26th ult., of pneumonia, Gustavus A. Rogers, M. D. (formerly of Bath, Steuben County, N. Y.), in the 75th year of his age.

Webb.—On the 19th of November, at the residence of Andrew Shaw, Esq., Falmouth, Nova Scotia, Angeline W. Webb, daughter of the late Dr. Samuel Webb, of Stamford, Conn.

Wilson.—Suddenly, Nov. 30, at Mendham, N. J., Wm. Wilson, M. D., of New York, in the 67th year of his age.

THE

MEDICAL AND SURGICAL REPORTER.

No. 825.] PHILADELPHIA, DEC. 21, 1872. [Vol. XXVII.—No. 25.

Original Department.

Communications.

TEACHING THE DEAF AND DUMB TO SPEAK.

By Laurence Turnbull, M. D.

Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

Continued from page 511.

PLAN OF INSTRUCTION.

"In teaching articulation a radical difference must be made at the outset between the semi-mute and the deaf-mute proper. The former has already *learned to talk;* the latter has everything to learn.

Our object should be to *keep up the knowledge* of spoken language possessed by the semi-mute, and to teach him the pronunciation of new words. This can be accomplished by the symbols of Visible Speech; and his voice may be prevented from becoming monotonous by the use of the allied elocutionary notation.

But the congenital deaf-mute (who may be taken as the type of the other class) has had no practice in the use of his vocal organs; and his mouth is at first incapable of using the language of hearing persons. The instrument of speech must be mastered like any other instrument, *by slow degrees.*

Hearing children (being guided only by imitation) require five or six years' practice in order to talk correctly, and even then it is astonishing how many grow up with defective articulation.

To expect the congenital deaf-mute to talk the moment he has mastered the elements of speech would be as unreasonable as to expect a child to play one of Beethoven's sonatas when he only knew the notes of his piano. He must have long and patient practice of scales and exercises, in order to obtain command over his instrument; he must have oral gymnastics, as a preparation for speech.

Should any one try the experiment of teaching a novice in music to play a sonata correctly, we may predict the result. Rapid passages would be slurred over, and many false notes be given.

The difficulties of execution would cause the performance to appear, at best, labored and mechanical, and the pupil would probably be disheartened. Should there be any approach toward correct playing, it could only be made through indomitable perseverance on the part of both teacher and pupil.

Analogy reveals the cause of the only partial success that has hitherto attended the efforts to teach articulation to the congenital deaf-mute. The attempt to make him utter words and sentences *from the very outset of his education* can only be productive of imperfect articulation. It will be difficult, and in many cases impossible, to correct afterwards the defects engendered by too great anxiety for progress on the part of his teacher.

The mouth must be educated to produce sounds before the difficulties of spoken language can be successfully grappled with. By means of the symbols the elementary sounds may be combined in all sorts of ways to form *senseless* compounds analogous to syllables, words, and sentences. These should be uttered at first very slowly; then, by degrees, faster and faster, until the power of

correct and rapid utterance has been attained. Then, and not till then, will it be safe to introduce articulation with sense attached.

Mr. Bell has suggested the following plan of instruction, which is suited to the capability of the very youngest beginner.

The imitative faculty of the child should be educated to the utmost, by causing him to copy the motions of the teacher's mouth. Direct him to make his tongue hard or soft, round or spread out flat; let him move it backward and forward, up and down, or in any way the fancy of the teacher may dictate.

English sounds may be obtained by imitation, and associated arbitrarily with their symbols.

The teacher should be careful not to spend too much time in laborious and disheartening efforts to obtain by imitation what will be more easily and certainly acquired afterwards. What is wanted is a mere foundation to work upon in the future. A skillful teacher will not confine himself to English elements, but will take whatever sound the child happens to make, and associate *that* with its correct symbol.

The sounds obtained are to be practiced in easy monosyllabic combinations, until they can be certainly discriminated.

When the child's attention is capable of being fixed, the meaning of the Visible Speech symbols may be explained to him. After this, he must *describe* as well as *sound* the elements mastered. No difficulty will be found with children of six or seven years of age.

New sounds should next be developed by appealing to the mind through the analogies of the symbols, and by forcing the tongue into new positions by means of the manipulator. Thus the mind, the eye, and the sense of touch in the pupil co-operate with the mechanical skill of the teacher to produce sure and certain results.

No articulation, however perfect, will be *agreeable* unless strict attention is paid to the accent and quantity of syllables, and to the modulation of the voice. Mr. Bell has therefore recommended that the study of rhythm, and the cultivation of the voice, should be added as *separate branches of education*, as soon as possible.

It is apart from the present subject to enter into a description of the notation for rhythm and modulation. Suffice it to say that a rhythmical exercise may be written upon the board. The children are required, at first, to clap their hands, or tap their slates, or make some other visible motion, *in concert*, while marching round the room. The rhythmical repetition of a syllable can then be substituted for the clapping of the hands, the pupils marching as before. Finally, the marching is relinquished, and the teacher beats time with his hand instead. In this way an appreciation of rhythm is developed before applying it to words. Classes can be exercised with regular rhythm, as it occurs in poetry, and individuals with the irregular rhythm of prose.

In regard to the modulations of the voice, all deaf-mutes can be trained to recognize at least five indefinite pitches. These may be called, "very high, high, medium, low, very low." By gliding from one to another, inflections can be produced. When these have once been obtained, we may seek to associate them with *feelings*.

Suppose the word "farm" to be uttered with a rising inflection, suggestive of interrogation. Let the teacher *look* interrogatively. The pupil will unconsciously imbibe the idea that the word "farm," with such a rise of the voice, is equivalent to the sentence, "Is it a farm?" So with other inflections. Modulations of the voice, expressive of surprise, sorrow, anger, etc., should have their meanings visibly apparent in the face of the teacher.

Mr. Bell looks forward with confidence to the time when deaf articulators will be taught the principles of elocution, so as to be enabled to read and speak with expression.

The following is a brief recapitulation of the plan of instruction:

"I. 1. Educate the imitative faculty.
2. Obtain sounds by imitation, and associate them arbitrarily with their symbols.

II. 1. Understand the symbols of Visible Speech, and describe the sounds obtained by imitation.
2. Utter easy monosyllables, formed from the sounds obtained by imitation.
3. Commence the study of rhythmical motions.
4. Obtain differences of pitch.

III. 1. Develop the remainder of the English alphabet from the sounds obtained by imitation.
2. Give oral gymnastics, with mono-

syllabic combinations of all the sounds perfectly uttered.

3. Repeat a syllable rhythmically.
4. Glide from pitch to pitch, so as to obtain as great a variety of inflections as possible.

IV. 1. Practice oral gymnastics with polysyllabic combinations, giving differences of accent and quantity.

2. Repeat a monosyllable, with differences of accent and quantity, and with inflections of the voice.

V. 1. Utter polysyllables containing difficult combinations of consonants.

2. Give polysyllabic combinations analogous to sentences, attending to accent, quantity, and to the movements of the voice.
3. Teach the spoken names of familiar objects. Seek merely to form a vocabulary.
4. Repeat words with different inflections, so as to convey an idea of the expressiveness of the various tones.

VI. Articulate sentences with fluency and distinctness, attending to accent, quantity, and to the inflections of the voice."*

To be Continued.

SCARLATINA.

By Theodore W. Stull, M. D.,
Of Marengo, Illinois.

Having recently passed through a severe epidemic of this disease, I have thought proper to give a short sketch of my experience with the same. Even before reading medicine, I was much impressed with the frightful fatality attending its visitations in epidemic form, and ever since have been much interested in perusing all the authors I could obtain, as well as the various communications published in the different medical journals upon this subject. The sweeping destruction it occasionally makes in the little family treasures, it seems to me, is certainly calculated to stimulate the earnest endeavor of the conscientious physician to acquaint himself with all that may possibly be of service in the mastery of this malady. The epidemic of the past winter has been very fatal in our neighboring county, but in our own vicinity I know of only one death in, perhaps, 60 cases, this one being under homœopathic supervision.

With the pathology or clinical history of the disease I have nothing new to offer. I can add nothing to the able descriptions given by West, Wilson, Smith, Meigs, and others. But with regard to the treatment I have a few words to say. All are agreed that mild cases require but little treatment. In the mild cases of the late epidemic I have given little and even no medicine at all. The better to illustrate my views, I briefly relate a few cases:—

Case I. October 23d, 1871, was called into a neighboring county, in consultation with a regular, in the case of Mary G., a child aged three years, strong, robust, and of decided sanguine temperament. Her brother, aged 13 months, had died the day before, and the anxious parents wished counsel in the case of their only remaining child. The little girl was burning up with fever, and very restless, with the throat so swollen that she swallowed with difficulty, and around which was Dr. Corson's abomination, "a poultice." Tongue heavily loaded with a yellowish fur; pulse 144, and small; bowels a little loose; eruption well out. I suggested that the poultice be taken away, and its place be supplied with cloths dipped in cold water, and changed every ten minutes, also the free administration of Watson's Chlorine Mixture. I also suggested that on the following day a grain of quinine should be given every three hours, much to the horror of my brother physician, who thought it rash in such a high state of fever. I afterward learned from the grandmother of the child that the directions were followed for 24 hours, with the effect of quieting the child, which dropped into a quiet sleep in a short time. Upon the next visit of the doctor, however, the cold water was dispensed with, and the hot applications renewed, as he said he had had better success with those. The child had a tedious convalescence, several abscesses forming in the glands of the neck.

Case II. November 13th, was called, in consultation, into the same neighborhood as Case I, with same physician, in the case of Lizzie B., aged ten years. She was taken sick the night before with vomiting and high fever. This also was a strong, healthy child. She was very restless and delirious; retching occurred every few minutes; pulse 160, small and difficult to find; eyes red and

* Am. Annals of the Deaf and Dumb, January, 1872, p. 10.

swollen; throat livid, but not very much swollen; tongue covered with a light creamy coat; bowels loose; urine scanty, and not very high colored; prognosis bad. The parents, who were away at the funeral of their little boy, who had died two days before, left word that they would dismiss the other physician, and wished me to take charge of the case. This I thought hardly fair, if we could agree in the method of treatment, and so insisted that my "brother" should remain with the case. Here was a fine opportunity to test the ice treatment of Dr. Corson in a desperate case. This was the treatment agreed upon at my earnest suggestion, and, therefore, we directed that lumps of ice be folded in thin cloths, and kept constantly applied to the glands of the neck. Also directed pieces to be held in the mouth, and allowed to dissolve. This, with the administration of a weak solution of chlorate of potassa, constituted the treatment.

Nov. 14th. Lizzie's condition not much changed, except that she was now totally blind, and the eruption began to manifest an appearance. I now followed the example of Dr. Corson, and stayed with the patient twelve hours, and attended to the applications myself. In addition to the treatment of yesterday, I cut the hair from her head, and applied an ice cap. This was occasionally removed when the impression seemed to be becoming too marked. Gave a little gruel as nourishment.

Nov. 15th. Lizzie more quiet, but evidently failing. Could see; eruption pretty well out; throat not so livid, and not any more swollen; bowels have run off several times.

Nov. 16th. Lizzie died last night at 10 o'clock.

Case III. Was a brother of Lizzie, two years older, not quite as robust as the sister. Was taken last night, a few hours before Lizzie died, in almost precisely the same manner as the sister, and manifests the same general appearance, though, perhaps, not quite so restless. This being my patient, and having, as I thought, given the ice a pretty fair trial, I put Henry upon the following:—

℞. Quiniæ,
Pot. chlo., aa gr.ij. M.
Ft. chart. S. One every four hours.
℞. Ammo. carb., gr.ij.
Ft. ch. S. One every four hours, alternating every two hours with first prescription. I also directed cloths dipped in ice water to be applied to the neck, and frequently changed.

Nov. 17th. Henry much the same, except not so much fever; the pulse fuller, and not so rapid. Treatment continued.

Nov. 18th. Still considerable fever; pulse less frequent, and increasing in strength; eruption appearing nicely. Rests well, except a good deal of itching of the skin. Quinine omitted; other treatment continued. Henry continued to improve, and the case was dismissed the seventh day.

Case IV. Nellie C., aged two years, healthy child; same neighborhood as the other cases. Taken Jan. 20th, 1872, almost precisely as Case II. The same overpowering prostration and restlessness. Was blind for a time. Treatment the same as Case III, due regard to age, except that ice was applied to throat. Case convalescent, and dismissed the ninth day.

Remarks.—Now, while I accord due praise to Dr. Corson for his vigorous advocacy of the use of cold water and ice in the treatment of scarlet fever, yet I fear it may lead others, as it did me, to ignore other adjuvants to the treatment that, in some cases, are imperatively demanded. I think very highly of the use of cold water and ice as an addition to the usual methods of treatment, but I never treat a case of any severity without the use of the carbonate of ammonia. I can also heartily subscribe to the value of the cold water in treating other affections of the throat; think I saved one case of membranous croup with its use. In short, as Prof. Allen would say, Let your treatment of scarlatina, as well as other diseases, depend upon "what's the matter."

Hospital Reports.

UNIVERSITY OF PENNSYLVANIA.

Service of Prof. D. Hayes Agnew, M.D.

[REPORTED BY DE FOREST WILLARD, M.D.]

Lithotomy.

Gentlemen: I have to show you, this morning, another "stone case," in accordance with a custom which has become almost a rule at this Clinic, that whenever one calculous patient presents himself, one, two, three, and sometimes five or six, are sure to follow in quick succession.

I spoke to you last week of the operation of lithotomy; let us consider this morning, first, the method of prevention in cases where a uric

acid diathesis exists, for as I then told you, the cause of stone is usually a peculiar tendency of the system to the formation of this material, due, I believe, in the majority of cases, to some disorder of the digestive system, or to malassimilation. The uric acid diathesis is by far the most common. It may exist in young children, and at any early age give rise to symptoms of vesical irritation. In these cases it would seem to be hereditary, and there are many authors who believe, with Stahl, that this condition is as transmissible from parent to child as is phthisis or cancer, and that where a calculus does not form it shows itself in the form of gout. That the two are allied diseases is certainly evident.

The first indication of the presence of this diathesis may not become apparent until adult life is reached, when the patient begins to notice that his urine habitually deposits upon cooling a fine reddish sediment upon the bottom of the vessel. The urine also appears thick and muddy upon standing, a circumstance which is often one of great concern to the patient. Of course you are not to judge at once that this deposit is necessarily a symptom of any disease, for it is one which has undoubtedly been noticed by all of you in your own experience after some indiscretion in overeating or drinking. When persistent and long continued, however, it should always become the subject of investigation. You should subject the urine both to the test tube and the microscope. In the former you will find that the muddiness all disappears as soon as the liquid is heated (provided no albumen be present); under the latter you will be able to see those beautiful rhomboidal crystals, or lozenge-shaped plates of uric acid, or else the various shaped crystals of the urates.

Uric acid will precipitate quickly at from 60° to 80° F., and even at 100°, if in excess. This latter fact explains its deposition in the kidneys, where the temperature must be above 100°. In all cases where this diathesis is present, there seems to be too great supply and too little waste of nitrogenous material, associated with the impairment of digestion before mentioned.

Prout seems to think that a calculus of this nature is secreted at one of the mammilary processes of the kidney; afterward becoming hard and contracting in bulk. One great cause of the deposit seems to be a supersaturation of the urine, in which concentrated form the salts are much more readily thrown down, especially in highly acid urine. The time when such an acid concentrated liquid would be most likely to be found in the kidneys or bladder, would be during the night, or at any time after long abstinence from food and drink. To prevent this it is wise for a patient who suffers from this diathesis to drink and eat frequently, the former especially before retiring, in order to prevent both acidity and concentration.

Uric acid calculi are usually small, hard, smooth, and of a fawn, yellowish brown, or brown color, while phosphatic concretions are chalky in color, larger in size, softer in density, and proportionately less in weight. The color and appearance of a stone only, however, shows the composition of the exterior coating; within the layers may be altogether different. In general terms we may say that a brownish surface indicates a uric acid crust; a white surface, phosphates; a cinder gray, urate of ammonia; cinnamon brown, uric or xanthic oxide; brownish or blackish green, oxalate of lime; gray-green, cystic oxide, etc.

Should such a deposit as the above material be found habitually present, you may soon expect to have the patient suffering with an attack of nephritic colic, occasioned by the passage of an aggregation of the little crystals, down the ureter. The symptoms attending the transit of such a body from the kidney to the bladder may be but slight, but if the calculus is of any magnitude there will be violent pain extending down the course of the ureter, nausea, vomiting, violent contraction of the cremaster muscle, drawing the testicle almost up to the external abdominal ring, tenderness in the supra-pubic region, a sense of constriction at the umbilicus, and finally, rigors and extreme prostration, all of which may suddenly cease by the dropping of the concretion into the bladder. Should it become arrested, however, anæsthetics will probably be required to control the pain, which is often quite unendurable. The free use of opium by mouth and rectum may answer the purpose, but it is too slow in its action. When (and only when) the bladder has been reached, is it proper to give diuretics. Never before this time, else damming of the ureter might occur. If the calculus is small it should escape from the urethra in the course of a few days, as a "gravel-stone," but in many cases it remains and forms a nucleus around which are deposited successive layers of urates, phosphates, oxalates, etc., one or all. The bases most commonly found in combination with uric acid are soda and ammonia. Now the fact of the deposition of uric acid taking place in the kidneys is not a proof that the kidneys are at fault; it may be, and, in fact, I believe usually is the case, that the liver, stomach, and nerve centres are performing their functions improperly, and the kidneys are consequently overtaxed.

This latter fact is one which we should keep constantly in our mind, in the correction of this diathesis, for although by rendering the patient's urine alkaline we may generally alleviate all the symptoms of vesical irritation, and render the urine clear and limpid, yet we shall not be able to affect the tendency to the production of this material unless we go deeper into the causes of its origin. First and foremost, the entire digestive apparatus should receive attention, such remedies being adopted as may seem to be demanded by the organ discovered to be at fault; I need hardly enume-

rate them; nitro-muriatic acid, pepsin, bismuth, etc. Alcoholic drinks of *all kinds* should be absolutely prohibited, also saccharine and fatty articles of food. In severe cases this regulation of diet should be rigid.

In addition to the above, we must medicate the system in such a manner as to render the urine continually alkaline, and thus prevent the deposition of these salts, by rendering them more soluble in the liquid. It must be confessed that vesical uric acid calculi will not be influenced by this mode of treatment, but that it does have an effect in preventing deposition in the kidneys, is undoubtedly true.

For the accomplishment of this purpose, the natural saline and alkaline waters possess peculiar advantages. Most prominent among them are the Vichy and Carlsbad; the former strongly alkaline, from the presence of bicarbonate of soda (44 grs. to the pint); the latter saline, from the sulphate of soda therein contained. Now although these substances are found in but small quantities in these solutions, yet nature seems to have combined them in such a manner that they are much more effective than are the same remedies when extracted from them. These waters artificially prepared by a close approximation of the quantities of ingredients, are also far less efficient.

When patients are able to bear the expense, a trip to the springs themselves may give that diversion to the mind and rest to the body, which, combined with the use of the waters, will be of great benefit.

We fortunately have medicines, however, which are capable of accomplishing much in producing an alkaline state of the urine. Of these, perhaps the best is the liq. potassæ of the Pharmacopeia, given to adults in doses of ten drops three times a day, in a tumblerfull of milk or flaxseed or slippery elm tea. The ordinary bicarbonate of soda is frequently used, as are also the acetate and citrate of potash.

To be effectual in producing any permanent good these must be continued for weeks and months. Their beneficial action is greatly increased by the administration of large quantities of liquid along with them, as, for instance, the flaxseed or slippery elm or uva ursi mucilages.

This use of alkalies in the treatment of calculous disorders is of ancient date, and in 1739 we find Parliament granting a reward of £5000 to a Miss Stephens, for a nostrum whose ingredients were found to be burned egg-shells and snails, with Alicant soap.

For further observations upon the solubility of various calculi, see paper read by Roberts before the Medical and Chirurgical society, March 28th, 1865. He advises the use of the acetate or citrate of potash, in doses of 40 grains every three hours.

The phosphatic calculi, of course, should be treated with acids, but there can be but little effected by the internal administration of such remedies. Injections of acid solutions into the bladder have also proved useless. The mulberry or oxalic acid calculus cannot be affected by any known treatment save the regulation of the digestive functions.

Thus much for the correction of the diathesis, but in many cases the patients will not be seen by you until a large stone has already formed. The symptoms denoting its presence have been already detailed to you, as have also the means of diagnosis, prominent among which is the use of the sound.

I have examined the child, 3 years of age, now before us, and know that he has a calculus in his bladder, but we will sound him again, since it is the rule never to operate unless the stone can be felt at the time. His symptoms are the same as those detailed in the case last week, only more severe, his mother informing us that he sometimes lies struggling and screaming for hours in the attempt to pass his water. He has been upon a preparatory treatment also, as in the other case, with the exception that he has taken sod. bicarb, gr. x. in a half tumbler of inf. uva ursi, three times in the day instead of the liq. potassæ. The "sound" is now in the bladder, and I think that all of you can distinctly hear the click of some hard body. To remove this foreign body we have two methods, one by cutting, lithotomy, the other by crushing, lithotrity. The latter is sometimes a very valuable operation, but in children lithotomy is so safe and effectual that I always perform it. I have spoken to you of the ordinary lateral operation of Cheselden, and have described it in detail, but there are other methods of reaching the bladder. There is the "bilateral operation," a favorite with many, performed with the double lithotome caché, an operation as old as Celsus; then there is the "median" or "Marian" operation, in the raphe of the body, revived by Rizzioli and Allarton; the "medio-lateral," performed with a rectangular staff; the "recto-vesical" devised by Sanson; the "suprapubic," practiced as far back at least as 1561, by Franco, especially of use in calculi of enormous size; the "pre-rectal," and lastly, "lithectasy," especially applicable in females.

The ordinary lateral operation, which I described to you last week, however, is the one which I always perform, and I believe it to be as near perfect as is any operation which we perform upon the human body. There are, however, certain dangers to be avoided. First and foremost the staff is to be firmly held just beneath the arch of the pubis, thus increasing the distance between the urethra and rectum. Then when the point of the knife is inserted into the groove of the staff, care should be taken that it does not slip out until the bladder is entered. Again, the staff should not be withdrawn, especially in children, until the finger has entered below it along the urethra, lest the viscus be not reached at all. If the stone cannot be found, every part of the organ should be thoroughly explored, pressure being made upon the viscus from above the pubis and also by a finger in the rectum. Remember that

the calculus may be encapsulated, or bound down by lymph, or suspended even by a fibrous cord; the scoop may sometimes be of service in turning a stone out from its bed, or in removing fragments. If the stone is too large to be brought through the opening first made, an attempt may be made to grasp it with the forceps in a smaller diameter; failing in this the opening may be enlarged with a probe-pointed bistoury, or preferably, moderately dilated. Sometimes in enormous stones it becomes necessary either to incise the right lobe of the prostate, or to crush the calculus, or lastly to perform a recto-vesical or possibly a supra-pubic operation.

After crushing, and in fact after any lithotomy, the bladder should be thoroughly cleansed by large injections of flaxseed mucilage, since but a small fragment would form the nucleus of a new formation.

In regard to hemorrhage, it is seldom dangerous, though frequently profuse. The superficial and transverse perinea arteries are necessarily cut, but will not require the application of a ligature unless they are unusually large. The inferior hemorrhoidal, the bulbous, the dorsalis-penis, or the internal pudic, should not be wounded unless they are abnormal in their course, in which latter case the hemorrhage will be very troublesome. The application of a ligature to the internal pudic is anything but an easy task; it is usually better to pick up the artery and tie it directly in the wound. If the bleeding is venous or capillary, pressure applied by the hands directly in the cut will usually control it, or the veins may be tied, or the bleeding mass may be seized with a pair of forceps, which may be allowed to hang from the wound for several hours. When high up, however, from the prostatic plexus of veins, the wound must be plugged tightly around a catheter, said catheter having been surrounded by a skirt (canula a chemise), making it like an umbrella, in order to render the removal of the pieces more easy. In deep-seated hemorrhage you must be upon your guard against concealed bleeding, which will sometimes occur to such extent as to fill the entire bladder with clots, as in a case at this clinic two years ago. In these cases there will be but little escape of blood from the wound, but the general symptoms are identical with those of internal hemorrhage from any vessel of the body. To avert this danger the patient should be carefully watched for five or six hours subsequent to the operation.

The instruments required for lithotomy are a sharp, narrow bistoury for making the incision, a probe-pointed one, for the secondary enlargement of the prostatic wound (when necessary), a grooved staff, several pairs of forceps, a syringe, and a large gum catheter. There should also be at hand a tenaculum, artery forceps, a short, sharply curved needle, ligatures, etc.

Care should be used in seizing the stone that the mucous membrane of the bladder be not also grasped. A stone must never be roughly dragged out, lest the prostate be stripped from its capsule, or otherwise severely injured. Such a procedure would be likely to be followed by serious inflammatory symptoms which, even if not fatal, might obstruct the ejaculatory ducts and cause subsequent impotence. Remember always to introduce the finger the second time to search for remaining calculi or fragments. Should the rectum be unfortunately wounded, the bowels should be confined for eight or ten days, in order to allow time for healing. If this does not take place, and a fistula occurs, it must be treated subsequently by operation. I gave you last week the ordinary after treatment. Inflammation, peritonitis, etc., are to be dealt with as in ordinary cases arising from any cause.

Lithotrity, or the crushing of calculi, will be described at a future clinic, if a suitable case shall present itself.

And now, gentlemen, having followed these two lectures upon lithotomy closely, you should feel competent to undertake the operation yourselves, if—(and this "if" is the all-important condition), if you have made yourselves perfectly familiar with the anatomy of the perineum. This wanting, it should never be undertaken by any one, for ignorance now is not as excusable as it was in the days of Frere Jacques.

(The child being now etherized, the lateral operation was performed, and a uric acid stone of the size of an almond easily extracted. The bladder was thoroughly cleansed, hemorrhage controlled by cold, and the patient put to bed; no unfavorable symptoms arose, and the child was dismissed in three weeks. Dr F. W.)

Ingrowing Nail.

The next case is a woman who comes to us with a sore toe, which, she says, has given her great trouble and pain for many years, at times incapacitating her for work. She informs us that she had what is known as an "inverted toe-nail," and that it was removed some two years ago, but that she still continues to suffer much pain. Now, if the operation was properly done, she should not have this difficulty; so let us look at the member. We find it swollen, inflamed, and suppurating; but, as I conjectured, here are little portions of the matrix which are endeavoring to reproduce nail, which, growing irregularly, cannot but act as an irritant to the flesh. Local remedies in this case will be useless; in fact, it is but seldom that I temporize with any ingrowing nails. An operation will usually be required in the end, and delay only occasions much suffering. In the early stages, relief may be afforded by lifting the edges with little pledgets of cotton, and scraping the nail in the centre; or by the removal of a V shaped median piece; or by compressing the granulations with adhesive strips; or by paring off the granulations; or by sprinkling the sore with hydr. ox. rubr.; but removal of the *entire* nail is the only procedure which will permanently cure a majority of the cases. I do not advise the taking away of

merely a small portion, but always take the whole. Nor is this all; for a most important part still remains to be done. The *matrix* must be completely destroyed, so that no new nail will form thereafter. Without this precaution a speedy return of the difficulty will almost certainly follow.

(The portions of the nail (the patient being, of course, etherized) were now loosened with the handle of a scalpel and removed, the fold of skin at the base of the nail slit up so as to freely expose the entire matrix, which was thoroughly cauterized with caustic potash stick, no portion being allowed to escape. In order to prevent the action being too great (as it might be followed by necrosis of the phalanx) oiled lint was inserted into the wound, and there retained for 24 hours. The subsequent treatment consisted of a poultice until the slough separated, and then cerat. resinæ. De F. W.)

Muscular Paralysis.

The next case is a man whose dislocated humerus of long standing was reduced at this clinic some months since. He now returns complaining that he has never fully regained the use of his arm since the time of the accident. Upon examination we find the muscles of the arm relaxed, flabby, and atrophied; due, probably, to pressure upon the axillary nerves, while the head of the bone lay so long in the armpit, or else, to inflammatory deposit around those nerves. He will be ordered five grains of the iodide of potassium, with ten drops of the syr. ferri iodid., vigorous friction of the parts with soap liniment, together with electrolysis of the affected muscles twice in the week. Under this treatment a slow but steady improvement may be expected.

Strangulated Inguinal Hernia.

The last case I have to show you is an old man, 70 years of age, who has had an oblique inguinal hernia for several years. It has always been easily reducible until night before last, when he was suddenly seized with a pain in that region, after a severe day's labor, and upon attempting to replace the tumor, found that he was unable to do so, nor has he been successful in his attempts since that time. He has been suffering most intense pain, with nausea, cramps, and prostration, but has as yet had no vomiting. His hernia has undoubtedly become partially strangulated, as I judge, not only from his symptoms, but from the appearance and feeling of the parts themselves. In these cases you must be careful in your diagnosis, but gentle in your manipulations. I will etherize him, and see if reduction cannot yet be secured. As he becomes thoroughly relaxed, I now slowly draw down the tumor, so as to free it from the external abdominal ring, and, as compression is made upon its sides, it yields, and after a few more gentle movements, slips into the abdominal cavity. He must now be put in bed, and an opiate administered inorder to give the bowel a period of repose. If I had failed, the symptoms not being serious, I should have ordered full and free doses of opium by the rectum, leeches to the groin, and then ice over the tumor.

JEFFERSON MEDICAL COLLEGE.

Surgical Clinic of Prof. S. D. Gross.

[Reported by Frank Woodbury.]

Amputation at the Shoulder Joint for a Central Osteo-sarcoma of the Humerus.

Saturday, Nov. 9th. This young man, nineteen years of age, is the son of a farmer, living in the interior of this State. On the 7th of last July, while at work, he accidentally struck his arm above the elbow. Very little ecchymosis followed this, and no swelling, and it produced so little inconvenience that he continued his work about the farm. About the 15th of August he first noticed a tumor, about as large as a pullet's egg, at the site of the injury. This rapidly enlarged, and in two months attained great size. The growth of this tumor has been unattended by pain; he has a good appetite, and sleeps well, but he has become very much emaciated. About six weeks ago he noticed, in the morning, that the humerus had given away during the night. One week ago the tumor was punctured for an abscess, but blood only followed the incision. He was then sent to me. When I saw him three days ago, his pulse was irritable and weak, and his face was sallow and anæmic. He has very much improved, both in spirits and appearance, under the use of good whiskey, milk punch, and anodynes at night.

Although this tumor extends from the lower part of the humerus up to the shoulder, yet I think the joint is not involved, nor is there any enlargement or induration of the axillary lymphatic glands. The entire limb is very œdematous from serous effusion, produced by the mechanical obstruction to the return of the blood. The tumor is of large size, and measures, at a point seven inches above the inner condyle or epi-trochlea, twenty inches in circumference; the opposite limb, at a similar point, measures seven inches. The entire length of the tumor is eight and a half inches. The subcutaneous veins over it are immensely enlarged, and the skin is discolored. In some parts of the tumor there seems to be beginning disintegration of the mass. This has all the features of a medullary or soft sarcoma. Were it not for the labors of Virchow, we should call this encephaloid, and there is but little material difference. This has all the distinctive features of true encephaloid disease, except the marked cachectic complexion and lymphatic involvement that generally exist in carcinomatous subjects; but this disease is quite as unrelenting, and progresses as steadily toward a fatal termination, as the malignant diseases proper.

This disease may have commenced in the interior of the bone, either in the cancellated structure, or in the endosteum, and in its prog-

ress secondarily involved the periosteum and soft parts; or it may have begun under the internal or vascular layer of the periosteum, and extending inward, destroyed the bone, and outward, involved the soft structures. The tumor is of the soft variety, commencing in the interior of the bone, in all probability, and is made up of large myeloid cells, which are the largest ever found in the body. They are called myeloid because they partake of the nature of those cells found in the shaft of the long bones of the fœtus. These were first pointed out by Niebauer and Sir James Simpson, and termed myelo-plastic tumors. This is also the medullary sarcoma of Virchow, in which the giant cells preponderate; they, however, do not exist alone, but are found in conjunction with round and spindle cells in an amorphous or slightly fibrillated intercellular substance.

The patient is in a very bad condition for such a serious operation as amputation, but after consultation with my colleague, Prof. Pancoast, who kindly offered to assist at the operation, we decided to give him a chance for his life by taking off this limb at the shoulder joint. We will have to make cutaneous flaps, as all the muscles are undoubtedly permeated by these cells, which have migrated and created an atmosphere of disease in the surrounding structures. If any portion of the diseased mass is allowed to remain, the disease will return in the wound.

I explained to the patient and his father that he may die at the time of the operation, or shortly after; or that he may subsequently perish from erysipelas or pyemia; or the disease may, and probably will, return, either in the cicatrix, or in one of the internal organs, more particularly the lungs. When a man submits to a serious surgical operation, he has a poorer chance for his life than a soldier has when he goes into battle. But the patient must take the risk of the knife, and we will shield him as much as possible from any injurious consequences therefrom. The character or extent of a wound is not always followed by proportionate results; men have actually died from a mere scratch or a flea bite; when I was in Louisville, I was called to attend a young man who died from the erysipelas ensuing upon a leech bite.

In performing the amputation I will commence my semi-lunar incisions at the front of the joint. I will leave the lower flap, containing the axillary artery, intact, until the latter part of the operation, when Prof. Pancoast will seize and tie the artery as soon as it is divided. During the operation Dr. Maury will compress the subclavian artery. By observing these precautions, I have twice, in this arena, amputated at the shoulder joint, with a loss to the patient of scarcely a drachm of blood. The parts are very vascular, and the skin is adherent, requiring the upper flap to be dissected from the tumor. The axillary artery was immediately tied after division, so that the patient has lost no blood except from the arm. We have removed the acromion process, and the wound will be left open to glaze until this afternoon. If I find any tendency to hemorrhage, I will immediately secure any bleeding vessels.

Nov. 13th. Our patient died from exhaustion about five hours after the operation.

The tumor, carefully dissected by Mr. West, is seen to be very large, lobulated, and cysts are seen in two places. One portion of it is evidently bony, from the sound elicited upon striking it. The shaft of the humerus is entirely included in the tumor, the surgical head and lower condyles only remaining intact, and the bone is fractured at the centre. Exactly where the morbid action began I am unable to pronounce; but it either commenced in the medullary canal, the cancellous structure, or immediately beneath the periosteum. If John Burns could rise from his grave, he would unhesitatingly declare that this belonged to the class of tumors which he denominated encephaloid or spongy. This was afterwards described by Mr. Hey, of Leeds, as fungus hæmatodes, or bleeding fungus. But a great change has come over the nomenclature of tumors within the last twelve years; due principally to the labors of Virchow, the celebrated pathologist and philosopher. Now, the fungus or encephaloid is termed sarcoma or fleshy tumor, and is subdivided, according to the microscopical characters, into round-celled, spindle-celled, and giant-celled, or myeloid. These cells generally associate together in the different growths, and the predominating variety determines the nature of the sarcoma. Had I not studied the writings of Virchow, I would have pronounced this disease encephaloid, as I have been accustomed to do for the past thirty-five or forty years. A remarkable circumstance in this tumor was the enlargement of the subcutaneous veins, which rarely accompanies sarcoma.

A section of the tumor was examined microscopically by Dr. R. M. Bertolet, who presents the following:—

"The tumor belongs to the class of sarcoma. The round cells have a very large, finely granular nucleus, generally containing a nucleolus. Many of the cells have already undergone fatty degeneration, and are more or less disintegrated. I could not find any myelopaques, and the hyaline intercellular substance is very sparse. Although I could not detect any commencing points of ossification in the small section sent me, yet they, no doubt, will be found in other parts of the growth, which may be considered as an osteo sarcoma."

Had the patient been brought to me early in the disease, an operation might have protracted his life, and he might have escaped the return of the disease entirely. But these cells are soon taken up by the veins and carried into the circulation, giving rise to secondary tumors in the lungs, liver, kidneys, spleen, pancreas, brain, and, in short, may form centres of disease in any structure of the body. In all cases, under all circumstances, these tumors are to be

regarded as malignant, and apt speedily to return, either in the wound itself or in some of the internal organs. The chief point in the diagnosis between carcinoma and sarcoma consists in the fact that in the latter disease there is no lymphatic involvement. In scirrhus or encephaloid of the breast the glands of the axilla are always implicated, but this never occurs in sarcoma of the mammary gland. Rapidity of growth should always excite suspicion of malignancy, and in such cases the earlier the part affected is removed the greater chance the patient has of escaping a recurrence of the disease.

Operation for a Strangulated Hernia.

A bright five-year-old boy is brought here by his mother on account of a strangulated hernia upon the right side. She tells us that he has worn a truss for a long time, for a hernia which was probably congenital. This was always easily reducible until three days ago, when it refused to return, and the child became subsequently restless, thirsty, feverish, and vomited constantly. His bowels have since been constipated, until last evening, when there was a spontaneous evacuation of the lower bowel.

In a child of this age the hernia is always by the oblique descent, the testicle occupying the lower part of the tumor, which, however, does not seem to be the case here; a circumstance which the mother readily explains by stating that the testicle never came down on that side. The tumor is solid and firmly impacted. Care must be taken in the taxis not to compress the bowel too firmly, as, being softened by inflammation, it might readily rupture. By flexing the thigh and compressing the tumor steadily, with thumb and finger, a gurgling noise is made by the return of some of its gaseous contents into the abdomen; this pleases the surgeon, as it establishes the diagnosis and partially reduces the bulk of the tumor. If this could not be obtained, in an obscure case, an exploring needle might be introduced without danger. When in doubt regarding strangulation, the rule is to operate, and if it does not exist no harm is done; on the other hand, delay threatens death from mortification of the bowel. An oblique incision is made over the tumor, dividing the skin and superficial fascia on a grooved director, carefully avoiding the epigastric artery. In operating upon young children it is better not to lay open the hernial sac, but to return the tumor en masse if possible; the danger from peritonitis is increased by opening the sac. By means of a little manipulation, the sac, bowel and omentum, with the bands of lymph, have been returned into the abdomen. The wound is brought together by two ligatures; a water dressing will be applied, and the case treated on general principles.

A Recto-Vaginal Fistule.

When this infant was born, about four months ago, its mother was only thirteen years of age. There is a congenital deficiency of the bones of the thumb of one hand, otherwise the child appears well formed. The mother states than when the baby's bowels are moved, it suffers such pain that it almost goes into spasms. On examining the parts the cause is evident. The position of the anus is indicated by a papule, and the bowel is practically impervious; a slit exists in the posterior wall of the vagina, through which the fœces are forced, producing the pain.

I propose to operate upon this child, to-day, for imperforate anus. The aperture in the vagina we will leave at present; when the child grows older it will have a tendency to contract spontaneously, or it may be brought together with one or two points of interrupted suture. Placing the child in the position for lithotomy, and taking this papule as our guide, we enlarge vertically the small opening that exists, and which is very inadequate. Dissecting this up we find the bowel, which we bring down and tack its mucous membrane to the external skin, as in the operation for phymosis, using several points of interrupted, fine steel-wire suture. I give no chloroform in these cases, as I do not care to run the additional risk. The great trouble after operating is to prevent the opening from contracting. This the mother must do by oiling her little finger and gently inserting it several times a day into the bowel. In the male the bowel sometimes terminates in a cul-de-sac three or four inches from the anus, which is represented by a depression resembling the umbilicus in the adult. In these cases you must take the natural course of the bowel as your guide and carry your dissection up until you find the rectum, when it may be brought down and fastened as you have just seen.

Specific Urethritis.

This young man, twenty-five years of age, has been brought here by his medical attendant from New Jersey. He complains of scalding in passing water, and a discharge of milky fluid either before or after micturition, with sometimes bloody urine. He urinates frequently during the day but does not have to get up at night. He has no pain in the perineum, but complains of a dull, aching pain in the lumbar region, which troubles him most at night. He thinks that this has existed for about four years, but has become aggravated within the last two months. He had chills and fever a year ago.

A sound passes readily into the bladder, and its withdrawal is followed by a few drops of a milky purulent fluid. I take it for granted that this is a case of specific urethritis or gonorrhœa, especially as he acknowledges connection. The pain in the back is probably neuralgic. Urethritis is not necessarily specific in its cause or character; a medical practitioner of my acquaintance has an attack whenever his general health is affected.

We will give this patient the balsam mixture and direct him to inject, thrice daily, a solution of Goulard's extract, in the proportion of one drachm and a half to twelve ounces of water. His diet shall be restricted, and the pain in his back may be relieved by rubbing upon it a small portion of

℞. Ung. Veratriæ ʒj.
Ung. Adipis, ʒj. M.

once or twice a day.

Editorial Department.

Periscope.

The Value of Food.

The Doctor quotes the views of Baron Liebig on this point, in refutation of the statements made by Dr. Edward Smith to the British Association, in a communication on "Preserved Food and Extract of Meat."

The economy of nutrition depends essentially on the right proportion, in the nourishment consumed, of the nitrogenous substances (meat, fish, eggs, etc.), and those free from nitrogen (starch, butter, sugar, etc.).

An excess of meat in the diet is waste, and the exclusive consumption of potatoes is likewise waste. The chemical composition of meat and of potatoes (as well as of all other articles of food) is perfectly well known, and it is therefore easy to calculate the proportion in which they must be mixed, in order to obtain the maximum of nutritive value for every individual at every stage of life.

Neither tea nor extract of meat are nutriment in the ordinary sense; they possess a far higher importance by certain medical properties of a peculiar kind. The physician does not employ them as specific remedies. They serve the healthy man for the preservation of his health.

It is surely a grave offence against all laws of physiology to compare tea, coffee, and extract of meat, to the more common articles of food, and because they are not that, to draw the inference, as Dr. Edward Smith has done, that they are nothing at all. This is certainly not scientific reasoning.

It has, however, never been asserted that one pound extract of meat represents 32 pounds of flesh; this is simply an invention of Dr. Edward Smith. The truth is that one pound extract contains the substances soluble in hot water of 32 pounds of flesh.

Dr. Edward Smith proceeds to say: "The composition is water (if you will completely dry a pot of the extract you will see how large is the proportion of water), the salts of meat, and the phosphates, extractive matters of a soluble kind, the peculiar flavor of roasted meat, and common salt, which are added to it." It is utterly impossible to suppose that Dr. Edward Smith intends to make us believe by this sentence that extract of meat is water, to which are added common salt, the phosphates of meat, the flavor of roasted meat, and soluble extractive matters. It is rather to be assumed that Dr. Edward Smith would have expressed himself quite differently, and more correctly, respecting the composition of extract of meat, if he were possessed of even a faint notion of the science of chemistry.

As regards the proportion of water contained in extract of meat, it is well known, through innumerable analyses, that it amounts on an average to 19 per cent. (*maximum* 22 per cent., *minimum* 16 per cent.). Extract of meat is beef-tea made from fresh beef, not roasted, in the purest state, condensed to the consistency of a thick honey, to which nothing whatever is added by the manufacturer. The assertion that common salt is added to the extract is an unjustifiable invention. The juice of the muscles contains, as a never absent component part, a small quantity of chloride of potassium, but no chloride of sodium (common salt).

In the selection of food, which is influenced by necessity or want, the instinct and the experience of the million are infallible, and a far better guide than the theoretic speculations of men who have remained ignorant of the composition of food, as well as of even the simplest laws of nutrition.

"Fish," says Dr. Edward Smith, "is sometimes suggested as a substitute for meat; but fish is rather a relish than food, and contains little more nutriment than water."

From Payen's investigation it is well known, however, that the flesh of fish, on the average, does not contain more water than fresh beef, and as much solid substance as the latter. For instance, the flesh of salmon contains 75.70 per cent. water and 24.296 per cent. solid substances, while beef (muscle) contains 75.88 per cent. water and 24.12 per cent. solid substances.

Treatment of Gonorrhœa.

Mr. J. L. Milton, of London, in his late work on gonorrhœa, divides the means of treatment into three, viz.: internal remedies, external applications, and direct applications. Under the first division he discusses the use of copaiba, stating that though it has proved of service in a great many cases, yet it fails in a certain number in every form, and that severe symptoms have been produced from its

use, "in doses which very good surgeons have not hesitated to recommend." He gives a table of cases treated with copaiba by him, with very unfavorable results.

He is favorably inclined toward the use of santal wood oil combined with injections, but states that it is extremely difficult to get it pure. The other remedies contained in this section he condemns. He makes a tirade against antiphlogistic means, such as blood letting, which seems to us to be at least twenty years behind date, as we know of no practice requiring to be thus declaimed against. A powerful purgative given at the outset of an attack, he believes, may be a material aid in cutting short the disease in mild cases; and aperients given along with injections, he thinks, may do good in many cases. It may here be remarked that this treatment, with the addition of the parts being supported, was prescribed at the out-door dispensary of the Glasgow Royal Infirmary by one of our professors, and it met with complete success in the greater number of cases. He thinks that diuretics may be of use. Mercurials he condemns, stating that they are still believed in in Germany, Belgium, and Italy.

The only thing recommended by him under the head of external applications, is hot water, so hot as to cause the penis to turn red. This he states gives great relief.

With regard to direct applications, he characterizes injections as the right arm of the service, and disputes the statement made by many, that injections induce orchitis or stricture, at the same time admitting that they may hasten the appearance of the swelling in orchitis, though they cannot be considered the predisposing cause.

With regard to the substances to be injected, he gives a list of forty-six, which have been proposed within the last few years, many of them wholly injurious. A number of these he discusses at length, but prefers nit. argent. and chloride of zinc. He then gives his own treatment, which he divides into abortive and ordinary.

The abortive treatment may be used in cases adapted for it, which he describes. It consists of nit. argent. gr. v. to gr. x. to the ounce, introduced well into the urethra by a syringe with a long nozzle. The exhibition of gr. iv. calomel, followed by seidlitz powders until several loose motions are produced, and after each motion patient to inject urethra with nit. argent. gr. iii. to v. to the ℥j. He states that few cases are found suitable for the abortive treatment. His ordinary treatment consists in administrating acetate of potash in combination with spirits of nitric ether, along with purgatives and aperients, and injections of nit. argent., commencing at gr. ½ to gr. j to ℥j., gradually increased to gr. x. to the ℥j. to be used once daily until the disease is almost gone, then every second day, and this to be continued for at least eight days after the last drop of discharge has shown itself. Along with this the patient may use an injection of the sulphate and chlor. of zinc, 2 grs. of the former to ¼ gr. of the latter to the ℥j. And he lays down as a golden rule in using injections, "a slight feeling of heat for quarter of an hour or twenty minutes after is all that's required." If more than this the injection is too strong, if less it is too weak.

In women he recommends the same internal treatment along with injections of sulph. of zinc, and after a time, of oak bark.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——*The Annual Report of the State Lunatic Asylum at Harrisburg*, for the year ending September 30, 1872, gives the following figures: The number of patients admitted during the year was 212; males, 119; females, 93; the number discharged during the same period was 196; males, 104; females, 92, of whom 51 were restored, 43 improved, 56 stationary, and 46 died. The number in the Hospital on September 30, 1872, was 467; males, 248; females, 219. The whole number under treatment during the year was 662; the lowest number was 441, and the highest number 496, and the average number, 469.04. The accounts of the treasurer show that the receipts of the institution, from all sources, for the past year, including balance in treasury, September 30, 1871, were $111,200.84, and the payments during the same period, $110,974.60, leaving a balance in the treasury September 30, 1872, of $226.24. To meet all the wants of the institution for the ensuing year, it is the opinion of the board that an appropriation from the State of $25,000 will be required.

——A writer in the *British Medical Journal* says about literary reviews in professional Periodicals:—"There has never been a period when the ordinary reviewing in medical papers has fallen so low as it has of late years. The reviews which appear in the average run of medical papers in this country have been gradually deteriorating in the hands of hack-writers until they have reached a level of absolute nullity; useful as booksellers' puffs; useful as additional advertisements to which authors have been taught to think themselves entitled unless their books were of conspicuous badness; but utterly without value as standards

of comparison, without instruction to the authors, without reliability for readers."

We should be sorry to think that the same is true of this country.

——Several eminent physicians and others, of various countries, are at present engaged in the work of preparing a model *European Pharmacopœia*, under the presidency of Dr. PHŒBUS of Giessen. The high and representative character of these gentlemen will command the most respectful attention to their labors, which will not unlikely produce visible results.

——*Vick's Floral Guide for* 1873 will be published quarterly. Twenty-five cents pays for the year, four numbers, which is not half the cost. Those who afterwards send money to the amount of one dollar or more for seeds, may also order twenty-five cents' worth extra, the price paid for the *Guide*.

The January number is beautiful, giving plans for making rural homes, designs for dining table decorations, window gardens, etc., and containg a mass of information invaluable to the lover of flowers. One hundred and fifty pages, on fine tinted paper, some five hundred engravings, and a superb colored plate and chromo cover.

BOOK NOTICES.

Transactions of the Medical Society of New Jersey, 1872. Newark, 1872. pp. 310.

The one hundred and sixth Annual meeting of this venerable Society seems to have been well attended, and the volume of *Transactions* which is before us contains not a few highly instructive pages. The address of the President, Dr. CHARLES HASBROUCK, is one of the wisest annual addresses we have read for a long time. The subject it discusses concerns most intimately the welfare, both of the public and the profession. It is upon "The Popularizing of Medical Knowledge as a means of correcting the popular tendency to Quackery in Medicine." Dr. HASBROUCK takes the liberal, enlightened and sensible stand that physicians should disseminate correct views on medical subjects, in popular language, through publications and the periodical press. This and this only, we have always held to be the most successful means to destroy irregular practice.

The Essay on diseases prevalent in the valley of the Delaware, by Dr. G. H. LARISON, is a useful contribution to medical topography. The Medical History of Hunterdon County, by Dr. JOHN BLANC, covers nearly one hundred and twenty-five pages, and has been very carefully worked up. It will be appreciated by the medical historian for its accuracy and fullness. The reports of District Societies embrace most of the counties of the State, and exhibit quite completely the sanitary status of the inhabitants during the year 1871. They include a number of suggestions on the treatment of common diseases worthy of memory, and also the reports of various noteworthy cases. Among the latter we may particularize a cyst of the right kidney, described by Dr. RICHARD M. COOPER, of Camden; frost-bite with gangrene, double amputation and recovery, by Dr. THOMAS M. LOUGHLIN, of Hudson County; an unusual recovery from fracture, by Dr. W. H. COLEMAN, of Trenton; a case of small-pox in utero, by Dr. H. R. BALDWIN, of New Brunswick, etc. We would also call attention to some very practical remarks on hernia, uræmia, and the occipito-frontal position, in a communication by Dr. T. RYERSON, of Newton, on page 300, etc.

Great care ought to have been exercised in printing the prescriptions; those on pages 262, 263, are barbarous.

Circular of Information of the Bureau of Education, for March 1872.

This has more than the average interest of Public Documents. It contains an inquiry concerning the vital statistics of College graduates; the distribution of college students in 1870 and 1871; and facts of vital statistics in the United States, with tables and diagrams. Dr. CHARLES WARREN is the author of the first two of these essays, and Dr. J. M. TONER of the last mentioned. What principally strikes the reader about the former is the extreme paucity of satisfactory statistics of any kind. Colleges should be made aware of the value which all such records have, and should be urged to keep them faithfully. Such as they are, only deceptive conclusions can be drawn from them. Of Dr. TONER'S article we have already spoken in a previous number of the REPORTER, and all we have to say now is that we commend to all students of statistics the admirable caution in reaching conclusions lately adverted to by us, as shown by Dr. BAKER in the Fourth Michigan Registration Report.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, DEC. 21, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE LITERARY WANTS OF THE PHYSICIAN.

How different is the study of medicine from what it was a score of years ago! The physician who still does business on the stock in trade he laid in when "attending lectures" or "walking the hospital," even a dozen years since, little knows the injustice he does his patrons, and the injury he does himself by his willful ignorance. Not a science has been more progressive than those which are called auxiliary to our art. The clinical use of the thermometer, the microscope, the induced current, the hypodermic syringe, the numerous "scopes," all these are late auxiliaries at our call in the battle with disease. The croakers about the poverty of therapeutics forget that the last decade has enriched the materia medica with some of its most effective arms for the same conflict.

To keep pace with these unceasing advances, the physician needs a periodical which will faithfully glean from the large scientific literature of this and other countries, accounts of their discoveries and improvements which are constantly heralded, and do this with judgment and insight, not merely to collect everything novel, strange, or sentimental, but only that which is approved or recommended by good authority, and which has practical, that is, clinical value. For after all, the practitioner is concerned primarily with that which will aid him to accomplish promptly and well one of the three great aims of his profession, to prevent disease, to cure disease, or to alleviate suffering. Hence he wants early, well selected, and varied reports of medical progress, presented either in Clinical Lectures by eminent teachers, in periscopic extracts, in editorial notices, or in summaries by special students.

But this is not all that the physician should seek in a medical journal. One of a great guild, with many interests common to others of the same avocation, he ought never to lose his interest in the profession, as such. He should know its leading spirits, the actions of its representative bodies, its relations to other professions and to the public; in other words, all the *news* about it should have for him an interest above that of the daily paper.

His own experience also constantly ripens and enlarges. His feeling that he is one of a large association of workers should prompt him to make public the carefully studied results of his experience. No intelligent man practices medicine for twenty years without having tested certain preparations, studied certain diseases, witnessed certain typical cases, which, properly prepared and presented, would be of very great value to his brother physicians. Part of the use of a journal, therefore, is to feel that it can be made the vehicle for disseminating such information.

Such ideas have controlled the editors of the MEDICAL AND SURGICAL REPORTER for years, and they have used and shall continue to use their best endeavors to bring it up to the model here set before them. Partly communicated, partly selected, partly original, aiming always to be fully abreas

of scientific progress, and giving prominent attention to the items of news which have an interest to medical men. its object is to supply the wants we have explained above.

The HALF YEARLY COMPENDIUM OF MEDICAL SCIENCE, which we also publish each January and July, is intended to *supplement* the REPORTER. It embraces all departments of medicine; it includes everything of scientific and theoretical progress which occurs in each six months. As far as practicable, *no article* appears *both in this* and in the REPORTER. The two publications make up *together* a complete survey of theoretical and practical medicine. The one does not embrace any part of the other, with a few merely casual exceptions, where repetition is requisite to keep up some connection of thought. The two publications together are so arranged as to *omit nothing* which the intelligent reading physician ought to know. With these, no matter how remote his locality, he will never find himself "behind the age."

At this season we have thought it well to explain the purposes of these publications, so that all might take advantage of them from the commencement of the year. We ask for them *both* a trial, and feel certain that no outlay will so well repay the physician as the small sum he will expend in their subscription price.

PHYSICIANS' BILLS.

If there be any one thing in the medical profession demanding a change, it is in the plan hitherto adopted, of sending bills for professional attendance only once, or perhaps twice, yearly.

There are many objections to this plan.

First. People frequently change their locations, and when sought, are therefore not to be found. Yet these same persons might have paid a small bill if promptly sent at the cessation of attendance.

Second. Bills running for a long time may, and generally do become large; and many persons cannot pay *one* large bill as easily as the same bill divided into parts, and presented at different periods.

Third. Bills, if let run till they become large, are more apt to have deductions voluntarily made by the sender, at the time of delivery; so that even if paid, less is realized by the doctor than if sent more frequently.

Fourth. After a long period has elapsed, people forget the length of time the physician has been in attendance, and may not feel the same satisfaction as if they had received their bills immediately, or soon after the services were rendered.

Fifth. In due course of time the gratitude is lost, and one great incentive to pay the bill is lost with it.

Sixth. By the course hitherto pursued attention must be too long bestowed before we can discover the true character of our debtors; and we really indirectly encourage those who make it a rule to go from doctor to doctor as soon as the bill becomes large or is presented.

Besides these reasons, we know that it is almost the universal practice now, in other kinds of business, to favor, and follow the method of sending statements frequently, and generally monthly. And why should not physicians observe in their business relations the rules pertaining to other business transactions?

In accordance with the above, we notice that the Sydenham Medical Coterie, of this city, has passed the following resolutions.

Resolved, 1st, That on every bill hereafter sent the following words be added: "*Bills rendered monthly.*"

Resolved, 2d, That the bills *be* thus often rendered, unless still in attendance on the patient."

We recommend this action to the notice of physicians, and if *all* would unite in this plan we think there would not be so much complaining among us about not collecting our dues.

Notes and Comments.

Medical Treatment of Prolapse of the Womb.

Dr. Andreef discards pessaries in such cases. In some cases he reports the treatment pursued consisted in replacing the uterus whilst the woman was in a recumbent position. Then, with the aid of the speculum, the fold of the vagina, that is to say, the part surrounding the os, was painted with half a drachm of a tincture composed of one part of tincture of iodine and one part of alcohol. He diluted the officinal tincture of iodine, because the undiluted tincture sometimes sets up acute catarrh of the vagina, and even of the uterus, as he had had an opportunity of observing previously. After the application of the tincture the patient remained for three days in bed, and had an injection four times a day of pure spring water at a temperature of 20° R. The painting was then re-applied, and the douches repeated. After a repetition of this plan of treatment four times the patient found herself well, and was dismissed. Four months subsequently she was pregnant and quite healthy; no descent of the uterus had occurred.

The American Hospital at Yokohama, Japan.

A correspondent of the *Inquirer*, of this city, says:—Surgeon H. C. Nelson, United States Navy, who has been in charge of the United States Hospital for some time past, left for home in the *Alaska*, on Nov. 7th, being relieved on that day by Dr. King, United States Navy. To Surgeon Nelson belongs the credit of building, organizing and putting into active operation the finest hospital in the whole East. He has shown excellent judgment in all his selections and appointments, and the Americans of Yokohama take pride in pointing to the American flag flying over a building that is an ornament to the place.

Therapeutic Value of Apiol.

MM. Joret and Homolle have obtained from the fruit of the common parsley, *Petroselinum sativum*, or *Apium petroselinum*, a yellowish, oily, non-volatile fluid, to which they have given the name of apiol. This fluid is heavier than water, soluble in alcohol, ether, and chloroform, but insoluble in water. It has a peculiar and penetrating odor. In small doses it produces a powerful excitation of the system, a lively sensation of heat in the thorax and epigastrium, eructations, nausea, vomiting, and sometimes even colic; in doses of from thirty to sixty drops it produces a kind of intoxication resembling that of haschisch or of quinine. It is recommended as a febrifuge in doses of fifteen grains or more; and though less powerful than quinine, it deserves to be employed. It has also been used as a remedial agent in amenorrhœa and dysmenorrhœa; its emmenagogue properties appear to be well established. The best mode of administering it is in the form of capsules.

The Dangers of Operations on the Neck of the Uterus.

M. Alph. Leteinturier draws the following conclusions from his observations:—1. Operations (even when slight) upon the neck of the uterus may prove the *point de départ* of serious affections. 2. In such cases, more or less ancient lesion of the uterine annexes is discoverable. The operation seems, so to speak, to awaken the old inflammation. 3. Three circumstances may be referred to as favoring and explaining this:—1. A partial lymphangitis, commencing at, and spreading from, the neck of the uterus. 2. General congestion of the pelvic organs. 3. A congestion localized in some part of the genital system, occasioned by a reflex action originating in the cervix.

Value of Yachting.

Dr. Roberts notices the uniformity of the temperature in the cabin of a well-ventilated yacht; and observes that although upon deck there is little protection from the sun's rays, the air is always pure and the mental exhilaration is great. He considers yachting especially adapted for convalescents from surgical operations, and for those suffering from chronic strumous affections, and the secondary consequences of venereal diseases; and, above all, from overworked brain and nerves. On the other hand, the indifferent ventilation below deck and the dampness above, the necessarily irregular mode of living, as well as limited space for exercise, render it undesirable for persons laboring under diseases of the heart and lungs and abdominal viscera. It is the surgeon, not the physician, who should send his patients yachting.

We are sorry to learn, by telegraph, of the death, at New Orleans, on the 6th inst., of the distinguished surgeon, Dr. Warren Stone. No particulars are given.

Correspondence.

Marriage and Long Life.

Eds. Med. and Surg. Reporter:

In the Reporter for Nov. 16th I find an editorial with the heading, "Does Marriage Prolong Life?" in which disparaging reference is made to Herbert Spencer, as attacking the affirmative of the question. I wonder that you have so misconceived the drift of Mr. Spencer's argument. The whole article from which your extract is taken is contained in the *Popular Science Monthly* for November In the pursuance of his subject, the study of Sociology, Mr. S has to show the difficulty of obtaining reliable statistical data on which to base a science of Sociology. And in illustration of this difficulty he exposes the unreliability of the data on which the question which you have put at the head of your editorial is generally decided. Mr. Spencer does not commit himself to either side. It is a question which will receive attention in his forthcoming work on the Principles of Sociology.

In the article in the *Popular Science Monthly*, which you cited, Mr. Spencer does not attack *the view*, but the *manner of proving it*. He says that the "figures" * * * "furnish no proof. There *may be* such a relation," etc.

I wish that I could see justice done one whom I cannot but regard as the foremost thinker of our age. His best critics have shown, by the transparent absurdity of many of their criticisms, that they have never thoroughly read him.

With regard to your hasty and impatient strictures on Mr. Spencer's philosophy, I have to observe: (1) Very many of the thinking young men of the country do not agree with you. To them Herbert Spencer is something more than a 'dexterous juggler." In "their earnest search for truth, they have seen reason to reject Christianity." To them the probabilities are *against* the truth of the common body of religious doctrines embraced by the sects of the day. These doctrines (and I except none that have not a firm scientific base on which to stand) are regarded by them as relics of superstition, "survivals" of a lower culture Yet *some* theory of things they must have, and they find none so reasonable, so comprehensive, so satisfying as the philosophy of Herbert Spencer.

That Mr. Spencer is not a Christian is his great crime in the estimation of the theologians, whose influence must wane in proportion as that of the former increases. And yet many of them are warm admirers of Mr. Spencer. Said an able D.D. to me the other day: "I thank God for Herbert Spencer. The more I read his 'Laws of the Unknowable,' the more I am established on the Rock on which I stand."

(2.) I am astonished that you should intimate that Mr. S. takes cognizance only of the "superficial phases" of things. In one respect, doubtless, this is true. He professes to deal only with *phenomena* (*i. e.*, appearances). The underlying *noumenon* is "unknowable." In this respect he is at one with almost every thinker of note that has ever lived (see First Principles, p. 69). If, however, you intimate that Mr. S. is a *superficial* thinker, in the sense in which it is popularly understood, you only manifest a deep prejudice against writings which it is evident you have never read. Our leading theological reviews will not agree with you there, as I could prove by copious extracts, if you had the space for them. When such men as McCosh, on the one hand, and John Stuart Mill, on the other, acknowledge his claims as a "profound and original thinker," it ill becomes *us*, less philosophic *medicals*, to call Herbert Spencer "superficial."

3d "His philosophy," you say, "finds all things easy." That is not the impression of one who for more than two years has been a student of Mr. Spencer's writings. It well defines the limits of philosophic thought. It unifies all phenomena It generalizes better than any other system of philosophy has ever done. In the world of matter and consciousness it brings *theory* into correspondence with *fact*. In accomplishing this result Mr. Spencer has shown himself the foremost philosophic mind of the age. But no one has been more ready to admit the *essential mystery* that encompasses us on all sides, that underlies all appearances. H.

News and Miscellany.

The Yale Medical School.

The *College Courant* says:—We see by the last catalogue that provision has been made in the plan of the new hospital building, at New Haven, for the accommodation and advantage of the Yale Medical School. Such a spirit is as pleasant as it is wise. The efficiency of the Medical School directly affects the success of the hospital management, but we feel the accommodation to the college is dictated as much by a friendly feeling towards it as by an enlightened selfishness. We are glad to see such a cordial spirit developing between the citizens and the college, for the idea that there is an irrepressible conflict between "town and gown" has lived fully long enough and done fully enough mischief.

Suicide Made Easy.

The papers say that a Cleveland druggist has invented a new article for suicides, that converts not only the body, but all the clothes and other attachments of the "one more unfortunate," into gases which rise to the clouds, and leave no trace behind. It would seem as if it had been extensively used in New York recently, from the number of mysterious disappearances there.

Longevity.

A contemporary sarcastically alluding to the numerous reputed instances of great age, reported in secular journals, says:—

"We are inclined to think there are more people living now who voted for Washington than there were in that illustrious patriot's own day. They have been starting up like the warriors of Cadmus ever since the last election. They are strangely uniform in their habits and practices, being generally given to the pernicious habit of tobacco chewing, which has unfortunately failed to shorten their lives, and having a remarkable propensity for sawing and splitting firewood in inordinately large quantities."

Gray Hair in Fashion.

A New York fashion writer says :—"The number of our prematurely gray young women on the streets, dressed in the height of fashion, and stylish, attracts attention. The hair is not powdered or frosted, but is really gray. One would hardly credit the fact, but a fact it is, that a chemical process is resorted to to bleach the hair white. The reign of the blonde is over, and the old term "tow-head," passes from room to room. Golden locks are at a discount. Raven traces are vulgar, and snowy hair is the style. The highest priced wigs are gray, and not black or auburn Such is the tyranny of fashion that young girls with black and auburn hair are crazy to have a bleached head.

Bogus Veterinary Surgeons.

The recently prevailing horse disease has brought to light many more veterinary surgeons than were known to exist heretofore. Many of them are armed with diplomas, claiming to be issued by a veterinary college in Philadelphia. The attention of the Bureau of Education in Washington having been called to the matter, inquiries were made, and the Bureau has been informed that no college of veterinary surgeons has any existence in this city. But there is a chartered organization here, entitled the "Pennsylvania College of Veterinary Surgeons." Although the organization has no college building of its own, it gives regular instruction, and has issued about a hundred valid diplomas in the last fifteen years.

Some singular Indians have been found near the coast of Peru They are ruddy and fair, with strong, shapely bodies, and long, full beards.

There are said to be a couple of active farm laborers at Para aged respectively 100 and 121 years.

Matthew Vassar and John Guy Vassar have decided to invest $100,000 in the founding of a hospital in Poughkeepsie.

NOTES AND QUERIES.

Pemphigus.

Messrs. Editors :—I have a case of prurigo senilis complicated with chronic pemphigus. The subject is 84 years of age, stout, and of good constitution, but of a dropsical predisposition. I have tried most of the usual remedies; all have proved unavailing so far as a cure is concerned. I have not tried arsenic, and would like to have your opinion. J. D. F. L.

South Carolina.

Reply.—We should not hesitate to try arsenic. Some of our readers may have other suggestions.

MARRIAGES.

Hitchcock—Lapsley.—In Philadelphia, Nov. 27, by Rev. Andrew Mackie, Charles Hitchcock, M. D., of New York, and Fannie, daughter of the late David Lapsley.

Jay—Vinton.—In New York, December 12th, at Trinity Chapel, by Rev. Alex H. Vinton, D D., assisted by Rev. Peter A. Jay, Dr. John Clarkson Jay, Jr., and Harriette Arnold, daughter of Major-Gen. D. H. Vinton, U. S. A.

McConnell—Reed.—By Rev. J. L. Fulton, Nov. 14th, Cyrus McConnell, M. D., and M. H. Reed.

McLahlan—Moore.—At the residence of the bride's mother, Nov. 28th, by Rev. J. J. Duran, Dr. C. D. McLahlan, of Harrodsburg, Ind, and Miss Lizzie B. Moore, of Bloomington, Ind.

Moore—La Reintree.—On the 12th inst., by the Rev. D A. Cunningham, Dr. J. W. Moore and Miss Florence La Reintree, both of Philadelphia.

Packard—McLanathan.—In New York, Dec. 11, at Zion Church, Madison avenue, by Rev. George Packard, of Lawrence, Mass., Charles W. Packard, M. D., and Elizabeth McLanathan, niece and adopted daughter of Col. D. F. Watson, of New York.

Rodgers—Watson.—By Rev. R. F. Wilson, in Bedford, Pa., June 20th, Joseph G. Rodgers, M. D., of Madison, Ind., and Miss M. S. Watson, of Bedford.

Unger—Slaymaker.—November 26th, by the Rev. Samuel E. Webster, Gap, Lancaster county, Pa., Dr. D. F. Unger, Mercersburg, Pa., and Sophie Slaymaker, Saulsbury, Lancaster county, Pa.

Vincent—Parker.—Dec. 10th, 1872, at the residence of the bride's parents, by Rev. Stephen H. Tyng, Jr., Charles R. Vincent and Nina, daughter of Dr. Theodore Parker, all of New York City.

DEATHS.

La Roche.—In this city, on the 9th inst., at his residence, No. 1407 Locust street, Dr. Rene La-Roche.

Mansfield—In this city, on the 12th inst., Helen P., wife of Dr. R. S. Mansfield, in the 48th year of her age.

Nash.—In Bridgeport, Conn., Dec. 9th, William B. Nash, M. D., in the 87th year of his age.

Thompson.—In Yonkers, N. Y., Dec. 8th, of diphtheritic croup, Charlie L., youngest son of Dr. J. B. and Susie V. Thompson.

Upson.—At Bath, N. Y., Nov. 17th, at the residence of his son-in-law, the Rev. James M. Platt, Dr. Hiram Upson, aged 69 years.

THE

MEDICAL AND SURGICAL REPORTER.

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Original Department.

Communications.

TEACHING THE DEAF AND DUMB TO SPEAK.

By Laurence Turnbull, M. D.

Physician to the Department of the Eye and Ear, Howard Hospital, Philadelphia.

Continued from page 527.

During the months of May and June, 1872, Mr. A. G. Bell introduced his father's system of "visible speech" at the American Deaf and Dumb Asylum, at Hartford, Connecticut, and, on June 22d, his report was published, addressed to Prof. Stone, the Principal, in which he makes the following statement.

"My father's system is now in practical operation in your institution, and two of your teachers, Mr. Clark and Miss Julia Sweet, are qualified to carry on our methods of instruction. The full results of the introduction of the system cannot be known for a long time to come. Since the commencement of May, ten pupils who had no knowledge of speech, and twenty-four semi-mutes, have been under instruction.

"*Results with semi-mutes.*—1. These pupils could pronounce, in May, 533 English elements; that is, they had retained 62 per cent. of the sounds acquired before they became deaf. 2. They have since mastered 98 sounds by means of visible speech, so that 73 per cent. of the English elements are now correct. 3. Several of the pupils had very disagreeable voices. In every case the power has been gained of producing natural tones. 4. The majority of the semi-mutes can vary the pitch of the voice.

"*Results obtained with ten pupils who had no knowledge of speech.*—1. 86 of the English sounds, or 24 per cent., were obtained, in May, by imitation. 2. From these sounds 189 others have been developed by visible speech, so that 76 per cent. of the English elements are now correct. 3. As in the case of the semi-mutes, all who have had disagreeable voices have now the power of producing natural tones. 4. All can vary the pitch of the voice. 5. Two young ladies can produce natural inflections. 6. Although it could scarcely be expected that these pupils should have acquired, in seven weeks, sufficient power over the instrument of speech to articulate sentences correctly, yet seven of them have succeeded in an astonishing degree. The remaining three pupils have progressed as satisfactorily as the others in mastering the elementary sounds. Two of them succeeded in articulating sentences, but in an imperfect manner. The third has been absent for some time. The progress of all these pupils, although they have been taught by four persons, has been so similar, as to show that success depends more upon the system than the teacher.

"At the exhibition the following sentences were uttered by these pupils almost as perfectly as if they had possessed hearing. 'I want to talk,' spoken by Miss Tait; 'How do you do?' by Miss Bailey; 'I love papa and mamma,' by Master Clark; 'I want some water,' by Master Bigelow; 'I want to go home,' by Master Fenner; 'The beef is tough,' by Miss Chaffin; 'I am deaf but not dumb,' by Miss Whiting. Miss Whiting and Miss Chaffin illustrated the power of the symbols over the unseen parts of the mouth, by making their voices disagreeable or sweet, at command. Miss Chaffin pronounced the word papa, varying the voice in a variety of ways.

"At the conclusion of the exhibition, Mr. Clark and Miss Sweet kindly consented to illustrate the power of the symbols in a more conclusive manner than could be done by the pupils. They accordingly left the hall, while the following words and noises were dictated by the gentlemen present. Arma virumque cano. 'It is very warm today.' An imitation of a cock's crowing. An imitation of planing wood. The peculiar click made in urging on a horse.

The word 'whoa.' These sounds having been written upon the blackboard in the symbols of visible speech, Mr. Clark and Miss Sweet were recalled, and after studying the symbols for a few moments, produced all the sentences and noises as originally given. Such a test as this, while exhibiting satisfactorily the strange power possessed by visible speech, of communicating any pronunciation without the aid of hearing, also conclusively shows that Mr. Clark and Miss Sweet have acquired a practical knowledge of the symbols. The interest they have shown in this invention, and the persevering efforts they have made to master all the details, have been very gratifying to me, and I feel perfect confidence in entrusting the system to their care."*

Instruction in Mr. Bell's method has been given during six months, and the following letter, in answer to one asking for information, has been received from Miss Sweet, giving some idea of the progress made in her classes. An opportunity of witnessing the good results was also given during a recent visit to that noble charity, which has been hallowed by the memories of the many distinguished philanthropists who have devoted their lives to the instruction of the deaf mute. The letter is dated American Asylum, Hartford, Conn., Nov. 23, 1872:

"I have fourteen† pupils who leave their school-rooms daily and come to me at different hours to be taught articulation. These pupils are in various stages of progress. Six are semi-mutes, who talk so as to be readily understood by any one, and can themselves understand me well, by reading from my lips. The others are congenital mutes, and those who lost their hearing before language was learned. You ask the number of sounds acquired. The six first mentioned could speak when they entered the class. In several cases nasality and harshness of voice have been removed, and many imperfections in articulation have been corrected. Great pains are taken to improve their knowledge of lip-reading. As to the congenital mutes, a part of them can give all the English sounds, both separately, and in many different combinations. Those who have more recently begun the study, and have not yet reached this point, will soon do so. Two of the original class were dropped; not that it was an impossibility to teach them, but they lacked application, and it was thought that the time could be better spent on others. We have another class taught by another teacher."

The following is an extract from a letter written by Harriet B. Rogers, dated Clarke Institution for Deaf Mutes, Round Hill, Northampton, Mass., Dec. 20, 1872:—

"All our pupils, fifty-six in number, are made to understand and read the symbols of 'visible speech,' but only two classes have used it from the time of entering the institution, as we introduced it into our school only in September, 1871. There were five pupils in last year's class. One of them, a little girl of ten years, acquired twenty-seven out of the thirty-seven English elements during the forty weeks' term; also a great variety of combinations, and learned considerable about inflection. Now she lacks but four elements—ē, ā, sh, and initial y. A boy in the same class during the first year learned all the elements which *she* now has, and has this term acquired the four he lacked the first year. Another boy in the class lacked, at the close of the year, twelve elements, but now lacks only four—k, g, ō, ou. His greatest difficulty is with combinations. He has not nearly as good control over his tongue as the first two mentioned.

"Of the eleven pupils in this year's class, a little girl of six years has acquired twenty-one of the elements, and can speak about one hundred and fifty words composed of these; also many combinations not forming words. She gives high, low, and medium pitch, and inflects the voice from any one pitch to each of the others. A boy in the same class, ten years old, has acquired nineteen of the elements, and speaks about two hundred words, beside many combinations not forming words. He gives only high and low pitch. His voice at first was *entirely* nasal, but has improved very much.

"The cases cited are those of totally deaf children, who did not speak when they entered school and had received no previous instruction.

"Another boy in this year's class, whose father had attempted to give him some instruction, has a little hearing, spoke some words indistinctly, and had six of the elements when he came here. He has gained twelve elements, and is less advanced in combinations than those just cited. His hearing has not yet been of advantage to him. Since writing the above the new class has acquired two more vowel sounds.

"We have dropped no pupils who have begun this work. I can give you no definite idea of semi-mutes.

"I feel that I have answered your questions very imperfectly, but it is almost impossible to put such things on paper. We would be very glad to show you our school if ever you come to Massachusetts."

Many, even of my medical readers, may not be aware of the large number of "deaf-mutes" in the United States. By a reference to the author's work, p. 470, it will be found that the number is over sixteen thousand.

* Hartford Courant, June 28, 1872.

† From Prof. Stone's Report, dated May, 1872, it is stated that "Instruction in articulation and lip-reading has been given, as in previous years, to twenty-five pupils, nearly all of whom were semi-mutes. They have been divided into classes of from three to six and eight, and have been taught about thirty minutes a day.

The reports of various deaf and dumb institutions complain that the United States census is inaccurate, and state that many mutes are known to have been overlooked and omitted in the list. In 1870 there were one thousand, six hundred and fifty-four deaf-mutes in New England, which includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut. In our own State there are some seventeen hundred cases, and the number is increasing every year at the rate of about 80; this is often from a want of the knowledge in physicians to prevent it. They neglect to treat catarrhs of the tympanum, which, as we have stated in our work, and in other places, arise in the course of the exanthemata, more especially in scarlatina, and owing to neglect of the ears, the young child becomes profoundly deaf, and consequently dumb, from not hearing the voice, there being serious morbid changes at, or following the attack; if attention, as I have before stated, was given to washing out the pus with a mild astringent or detergent in cases of acute peforation, much good would follow. In the other class of cases, in which the membrana tympani resists the pressure of this pus, and the pent-up matter cannot make its escape, the life of the child can be saved by puncturing the membrana by a delicate cataract needle, or knife, at its most *dependent* point. For the diagnostic marks upon this membrane, and details of the operation, we would refer our readers to the article in the author's work, p. 179, entitled paracentesis of the membrana tympani. These two terminations are both favorable if the operation is in time to save the brain, for at other times the restlessness and pain in the ears are followed by symptoms of grave cerebral disturbance, such as vomiting, convulsions, coma and death. Still there is another form or termination of this disease; it is in the form of cases in which the patient recovers with the hearing more or less impaired, and the tympanic secretion becomes more or less inspissated or organized, either the mucous or serous secretion with bands of lymph forming bridges by which the bones of the ear become fixed or anchylosed, more especially the base of the stapes which acts upon the oval window, and prevents action upon the nerves of the ear, by means of the labyrinthic fluid; but even in this stage, if the matters are soft there is the peculiar color and curvature of the membrana tympani to guide us so as to operate for the removal of these deposits by perforation, afterwards washing them out and the use of Politzer's air douche, as given at pp. 238--43; the child may thus retain enough hearing to prevent it from becoming mute. Another matter physicians should endeavor to convey sound instruction upon, is the great disadvantage of marriages of consanguinity, for sad proofs have been given that the offspring of such are often deaf and dumb; for of sixty-five families in the records of the Pennsylvania Institution (from which, during the year 1871, sixty-seven pupils were received) seventeen contain each more than one deaf-mute child; eleven families contain each two, two families each three, and three families contain each four deaf-mutes. In most of these instances the parents were first or second cousins.

In conclusion I would most earnestly suggest that physicians all over our extended country would use their influence among their patients who have deaf-mute children, that they should have the opportunity given them of acquiring articulation, even if it be for no other purpose than as a most valuable physical and vocal exercise, tending, as Mr. Bell has expressed it, to "develop and strengthen the lungs;" at p. 404 of the author's work is given the 33 Institutions for the instruction of the deaf-mutes in the United States, and only twenty-six hundred and eighty-seven pupils are under tuition; there must be many others of suitable age that should be receiving the great blessing of an education, for of the whole number of mute children at school-age in the United States, it is stated there are seven thousand four hundred and fifty four, and if we include the territories it would give us one hundred and eight more. We must endeavor to act also upon Legislatures and benevolent men, to found many new institutions all over the length and breadth of the land; and every large city should have a public school like that of Boston, where the mute child, speechless no longer, can go to its parents, after receiving instruction, and enjoy home, and no longer be as an alien among its own people; fitted not only to mix and hold converse with the deaf, but also with the world at large, making, we trust, a more happy being, and every way better able to live.

Editorial Department.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A new edition of Prof. Hugh L. Hodge's Lecture on "*Feticide, or Criminal Abortion*," has been published by Messrs. Lindsay & Blakiston, of this city. (Price 30 cents). It is a forcible and timely essay, though in some respects, overdrawn. Who, for instance, would defend the literal correctness of the following sentence (p. 28): "The mother has little more influence upon the child in utero than the parent bird has upon its offspring in the egg?" Neither is it scientific to assert that "the mystical union of matter and spirit occurs at the time of conception." Science says nothing about this.

——The *Photographic Review of Medicine and Surgery*, published by J. B. Lippincott & Co., of this city, has suspended publication.

——The long expected work of Mr. Haviland has appeared in London, "*The Geographical Distribution of Disease, in England and Wales.*" In this work medical topography has been reduced to a complete system as regards England and Wales, and afflicted persons are thereby enabled to ascertain at a glance what localities to remove to with a prospect of benefiting their health, and what to avoid. He has taken as his materials for information the annual Reports of the Registrar General of Births, Deaths, and Marriages in England, from 1839, the year when the Act for registering these data came into operation, down to the latest reports. The information which is thus made public, but which is scattered through the thirty-two annual reports, has now been utilized by Mr. Haviland, in a series of maps illustrating the local distribution in England of all the principal diseases. One of them for an example, of heart disease, illustrates the relations of this disease to locality on a scale of twelve miles to the inch.

BOOK NOTICES.

Obstetric Aphorisms: for the Use of Students Commencing Midwifery Practice. By Joseph Griffiths Swayne, M. D., etc. Second American, from the fifth revised English edition, with additions by Edward R. Hutchins, M. D. Philadelphia: Henry C. Lea, 1873. 1 vol., 12mo, pp. 189. Cloth.

The nervousness which most youthful practitioners experience when summoned to an obstetrical case will be materially diminished by a close study of this little manual. They would find it, indeed, a source of mental comfort to have it in their coat pocket, and during the tedious hours of waiting to con with care its judicious suggestions.

A few words will explain its scope. Fifty pages are devoted first to the management of ordinary labor; then follows a chapter describing cases which the student may undertake without assistance; and then another, which sets forth those contingencies in which a novice in obstetrics will do well to call in a more experienced hand. The diseases of pregnancy, the care of the newborn infant, and the treatment of abortions are embraced in the last part of the volume.

Numerous illustrations are interspersed, representing the various positions of the fœtus, etc. The American editor has added a number of brief remarks, which are calculated to increase the value of the work. The chapter on Abortions is by him, and he takes occasion, not merely to give the treatment, but also to warn his younger readers of the frequency with which they will be asked to destroy fœtal life, and the nefariousness of doing so. We believe he exaggerates the extent of the evil (unwittingly), but it is well enough to be on the safe side. That the crime is "more prevalent in our own country than in any other of the world" (p. 575), we firmly believe to be a most extravagant expression, not justified by facts. That it is only too prevalent, we know, and sincerely hope Dr. Hutchins' chapter may lessen it. A convenient index closes the volume.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, DEC. 28, 1872.

S. W. BUTLER, M. D., D. G. BRINTON, M. D., Editors.

☞ Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical*, *brief* as possible to do justice to the subject, and *carefully prepared*, so as to require little revision.

☞ Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editors disclaim all responsibility for statements made over the names of correspondents.

THE CLOSING YEAR.

In closing another volume of the MEDICAL AND SURGICAL REPORTER, we cannot allow the opportunity to pass without thanking our subscribers for the numerous and warm expressions of good will which we have received during the last six months. We have earnestly endeavored to supply the members of the profession who take our journal with the amount and character of information which would be most useful to them and most interesting also. That we have succeeded to an extent almost equal to our hopes, we are assured by many letters and verbal expressions of opinion.

Encouraged by such "words of cheer," we shall endeavor in the future to adapt our publications still more completely to the wants of the profession. The experience of some years in this labor serves to inform us what medical periodical literature should be, and no pains shall be spared to bring the works from our office fully up to the highest standard.

The literary aid of some of the most eminent men in the profession has been secured for our next volume; while the business department of our establishment has been placed on such a footing that we believe in future neither delays, irregularities nor neglect can be laid to our charge.

Both the editors who have heretofore devoted their time to our publications—Dr. S. W. BUTLER and Dr. D. G. BRINTON—will continue to do so, and will aim always to present a "brief abstract and mirror of the times," in their medical and scientific aspects, through our pages.

NOTES AND COMMENTS.

Treatment of Poisoning by Hydrate of Chloral.

Dr. ERLENMEYER remarks that the quantity of hydrate of chloral required to produce poisonous symptoms is undetermined. The smallest quantity known to have produced poisoning is two and a half scruples; while on the other hand, as much as 460 grains has been taken without danger. The symptoms of poisoning by chloral are, diminished frequency of respiration, redness of the conjunctivæ, contraction of the pupils, lividity of the lips, and falling of the lower jaw; the state of the pulse has varied very much in several cases. The most important indication is the removal, as quickly as possible, of the chloral remaining in the stomach, or its dilution by water containing tea, coffee, or rum. The second indication is to restore the respiration. Not much benefit is to be expected from the use of strychnia, physostigma, morphia, camphorated ether, or ammonia, which are supposed to act as antidotes to chloral. Transfusion of blood may perhaps be found useful, as it has already been in poisoning by chloroform.

Tincture of Iodine in Cholera Infantum and Dysentery.

Dr. GILLIAM says, in *The Clinic*, "As iodine has the property of arresting transudations, and as it is of particular value in many inflammatory affections of the skin, and as the skin and mucous membrane are very analogous in structure, *a priori*, it would seem probable that iodine might be of service in the above-named affections. I have tried it in a case of cholera infantum and in a case of dysentery. It seemed to yield good results in the former and eventuated in a cure. In the latter its influence was not so marked, though seemingly beneficial. I am now trying it in a case of dys-

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Medical and surgical reporter
(Philadelphia)

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